## Algebra II

Lesson \#2 Unit 6 Class Worksheet \#2 For Worksheets \#2 \& \#3

## Algebra II Factoring Trinomials - Type 2

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Consider the following multiplication problems.

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$(2 x+5)(3 x+4)=$

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(a x+b)(c x+d)=
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## Algebra II Factoring Trinomials - Type 2

Consider the following multiplication problems.

$$
(2 x+5)(3 x+4)=6 x^{2}
$$

$(5 x+2)(x+4)=$

$$
(a x+b)(c x+d)=
$$

## Algebra II Factoring Trinomials - Type 2

Consider the following multiplication problems.
$\left(\underset{\sim}{(2 x+5)(3 x+4)}=6 x^{2}\right.$
$(5 x+2)(x+4)=$

$$
(a x+b)(c x+d)=
$$

## Algebra II Factoring Trinomials - Type 2

Consider the following multiplication problems.

## $(2 x+5)(3 x+4)=6 x^{2}+$

$(5 x+2)(x+4)=$
$(\mathbf{a x}+\mathbf{b})(\mathbf{c x}+\mathbf{d})=$

## Algebra II Factoring Trinomials - Type 2

Consider the following multiplication problems.

## $(2 x+5)(3 x+4)=6 x^{2}+8 x$

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Consider the following multiplication problems.

$$
(2 x+5)(3 x+4)=6 x^{2}+8 x+15 x+20
$$

$(5 x+2)(x+4)=$

$$
(a x+b)(c x+d)=
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Consider the following multiplication problems.
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$\mathbf{x}$ is a factor of both terms.

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$x$ is a factor of both terms. 'Factor out' the $x$.

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(a x+b)(c x+d)=a c x^{2}+a d x+b c x+b d=a c x^{2}+(a d+b c)
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$(\mathbf{a x}+\mathbf{b})(\mathbf{c x}+\mathbf{d})=\mathbf{a c} \mathbf{x}^{2}+\mathbf{a d x}+\mathbf{b c x}+\mathbf{b d}=\mathbf{a c x}{ }^{2}+(\mathbf{a d}+b c) \mathbf{x}+\mathbf{b d}$

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$$

We want to find a connection between the original problems and the final answers.

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Consider the following multiplication problems.

$$
\begin{aligned}
& (2 x+5)(3 x+4)=6 x^{2}+23 x+20 \\
& (5 x+2)(x+4)=5 x^{2}+22 x+8 \\
& (a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d
\end{aligned}
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Consider the following multiplication problems.

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& (2 x+5)(3 x+4)=6 x^{2}+23 x+20 \\
& (5 x+2)(x+4)=5 x^{2}+22 x+8 \\
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The problems involve multiplying two binomials

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The problems involve multiplying two binomials of the form ax + b

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## Algebra II Factoring Trinomials - Type 2

Consider the following multiplication problems.

$$
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& \frac{8 x}{(2 x+5)(3 x+4)}=6 x^{2}+23 x+20 \\
& (5 x+2)(x+4)=5 x^{2}+22 x+8 \\
& (a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d
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## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

1. $(3 x+2)(x+5)=$
2. $(2 x+1)(4 x+3)=$
3. $(2 x-3)(5 x-2)=$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

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## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

1. $\left(\frac{15 x}{(3 x+2)(x+5)}=\xrightarrow[3 x^{2}]{ }\right.$
2. $(2 x+1)(4 x+3)=$
3. $(2 x-3)(5 x-2)=$
$(\mathbf{a x}+\mathbf{b})(\mathbf{c x}+\mathbf{d})=\mathbf{a c} \mathrm{x}^{2}+(\mathbf{a d}+b c) \mathbf{x}+\mathbf{b d}$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

1. $\left(3 x+\underset{2 x}{\frac{15 x}{2 x}(x+5)}=3 x^{2}\right.$
2. $(2 x+1)(4 x+3)=$
3. $(2 x-3)(5 x-2)=$
$(\mathbf{a x}+\mathbf{b})(\mathbf{c x}+\mathbf{d})=\mathbf{a c} \mathrm{x}^{2}+(\mathbf{a d}+b c) \mathbf{x}+\mathbf{b d}$

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1. $(3 x+\underset{\underbrace{2}_{2 x})(x}{15 x}+5)=3 x^{2}+17 x$
2. $(2 x+1)(4 x+3)=$
3. $(2 x-3)(5 x-2)=$
$(\mathbf{a x}+\mathrm{b})(\mathbf{c x}+\mathbf{d})=\mathbf{a c} \mathbf{x}^{2}+(\mathbf{a d}+b c) \mathbf{x}+\mathbf{b d}$

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\text { 1. }(\overbrace{3 x+\underset{2 x}{2)}(x+5)}^{15 x}=3 x^{2}+17 x+10
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Perform the indicated operations.

$$
\text { 1. }(\overbrace{2 x+\underset{2 x}{2})(x+5)}^{\frac{15 x}{(x)}}=\underline{3 x^{2}+17 x+10}
$$

2. $(2 x+1)(4 x+3)=8 x^{2}$
3. $(2 x-3)(5 x-2)=$
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$$
\begin{aligned}
& \text { 1. }\left(3 x+\underset{2 x}{\frac{15 x}{2 x}(x+5)}=-3 x^{2}+17 x+10\right. \\
& \text { 2. }(2 x+1)(4 x+3)=8 x^{2}
\end{aligned}
$$

3. $(2 x-3)(5 x-2)=$
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3. $(2 x-3)(5 x-2)=$
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Perform the indicated operations.

3. $(2 x-3)(5 x-2)=$
$(\mathbf{a x}+\mathbf{b})(\mathbf{c x}+\mathbf{d})=\mathbf{a c} \mathrm{x}^{2}+(\mathbf{a d}+\mathrm{bc}) \mathbf{x}+\mathbf{b d}$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

$$
\text { 1. }(3 x+\underset{2 x}{2)(x+5})=3 x^{2}+17 x+10
$$

2. $(2 x+1)(4 x+3)=8 x^{2}+10 x$
3. $(2 x-3)(5 x-2)=$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

$$
\text { 1. }\left(\frac{15 x}{(3 x+\underset{2 x}{2)(x}+5)}=3 x^{2}+17 x+10\right.
$$

2. $(2 x+1)(4 x+3)=8 x^{2}+10 x$
3. $(2 x-3)(5 x-2)=$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

$$
\text { 1. }(\overbrace{3 x+\underset{2 x}{2)}(x+5)}^{15 x}=3 x^{2}+17 x+10
$$

2. $(2 x+1)(4 x+3)=8 x^{2}+10 x$
3. $(2 x-3)(5 x-2)=$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

$$
\text { 1. }(3 x+\underset{2 x}{2)(x+5})=3 x^{2}+17 x+10
$$

2. $(2 x+1)(4 x+3)=8 x^{2}+10 x+3$
3. $(2 x-3)(5 x-2)=$
$(a x+b)(c x+d)=\mathbf{a c} x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

$$
\text { 1. }\left(3 x+\underset{2 x}{15 x}(x+5)=3 x^{2}+17 x+10\right.
$$

2. $(2 x+1)(4 x+3)=8 x^{2}+10 x+3$
3. $(2 x-3)(5 x-2)=$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

3. $(2 x-3)(5 x-2)=$
$(\mathbf{a x}+\mathrm{b})(\mathbf{c x}+\mathbf{d})=\mathbf{a c} \mathbf{x}^{2}+(\mathbf{a d}+b c) \mathbf{x}+\mathbf{b d}$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

3. $(2 x-3)(5 x-2)=$
$(\mathbf{a x}+\mathbf{b})(\mathbf{c x}+\mathbf{d})=\mathbf{a c} \mathrm{x}^{2}+(\mathbf{a d}+\mathrm{bc}) \mathbf{x}+\mathbf{b d}$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

3. $(2 x-3)(5 x-2)=$
$(\mathbf{a x}+\mathrm{b})(\mathbf{c x}+\mathbf{d})=\mathbf{a c} \mathbf{x}^{2}+(\mathbf{a d}+b c) \mathbf{x}+\mathbf{b d}$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

1. $\left(\sqrt{(3 x+\underset{2 x}{2(x)}(x+5)}=\underline{3 x^{2}+17 x+10}\right.$
2. $\left(2 x+\underset{4 x}{\frac{6 x}{1}(4 x+3}\right)=\xrightarrow[8 x^{2}+10 x+3]{(4)}$
3. $(2 x-3)(5 x-2)=$
$(\mathbf{a x}+\mathbf{b})(\mathbf{c x}+\mathbf{d})=\mathbf{a c} \mathbf{x}^{2}+(\mathbf{a d}+b c) \mathbf{x}+\mathbf{b d}$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

3. $(2 x-3)(5 x-2)=$
$(\mathbf{a x}+\mathrm{b})(\mathbf{c x}+\mathbf{d})=\mathbf{a c} \mathbf{x}^{2}+(\mathbf{a d}+\mathrm{bc}) \mathbf{x}+\mathbf{b d}$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

3. $(2 x-3)(5 x-2)=10 x^{2}$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

3. $(2 x-3)(5 x-2)=10 x^{2}$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

3. $(2 x-3)(5 x-2)=10 x^{2}$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

$(a x+b)(c x+d)=\mathbf{a c} x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

Algebra II Class Worksheet \#2 Unit 6
Perform the indicated operations.

$$
\begin{aligned}
& \text { 1. }\left(\sqrt{(3 x+\underset{2 x}{2)(x+5}}+\frac{15 x}{3 x^{2}+17 x+10}\right. \\
& \text { 2. }\left(2 \underset{4 x}{\left.\frac{6 x}{1)(4 x}+3\right)}=\xrightarrow[8 x^{2}+10 x+3]{(4 x}\right. \\
& \text { 3. }(2 x-\underset{-15 x}{-4)(5 x}-2)=-10 x^{2}-19 x \\
& (a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d
\end{aligned}
$$

Algebra II Class Worksheet \#2 Unit 6
Perform the indicated operations.

3. $(2 x-3)(5 x-2)=10 x^{2}-19 x$
$(\mathbf{a x}+\mathrm{b})(\mathbf{c x}+\mathbf{d})=\mathbf{a c} \mathbf{x}^{2}+(\mathbf{a d}+\mathrm{bc}) \mathbf{x}+\mathbf{b d}$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

3. $(2 x-3)(5 x-2)=10 x^{2}-19 x$
$(a x+b)(c x+d)=\mathbf{a c} x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

3. $(2 x-3)(5 x-2)=10 x^{2}-19 x$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

3. $(2 x-3)(5 x-2)=10 x^{2}-19 x+6$
$(\mathbf{a x}+\mathbf{b})(\mathbf{c x}+\mathbf{d})=\mathbf{a c} \mathbf{x}^{2}+(\mathbf{a d}+b c) \mathbf{x}+\mathbf{b d}$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

3. $(2 x-3)(5 x-2)=10 x^{2}-19 x+6$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

$(\mathbf{a x}+\mathrm{b})(\mathbf{c x}+\mathbf{d})=\mathbf{a c} \mathbf{x}^{2}+(\mathbf{a d}+\mathrm{bc}) \mathbf{x}+\mathbf{b d}$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

$(\mathbf{a x}+\mathbf{b})(\mathbf{c x}+\mathbf{d})=\mathbf{a c} \mathrm{x}^{2}+(\mathbf{a d}+\mathrm{bc}) \mathbf{x}+\mathbf{b d}$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

1. $(3 x+2)(x+5)=3 x^{2}+17 x+10$
2. $(2 x+1)(4 x+3)=8 x^{2}+10 x+3$
3. $(2 x-3)(5 x-2)=10 x^{2}-19 x+6$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.
4. $(3 x-4)(2 x-5)=$
5. $(2 x+3)(3 x-2)=$ $\qquad$
6. $(4 x+3)(x-5)=$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.
4. $(3 x-4)(2 x-5)=$
5. $(2 x+3)(3 x-2)=$
6. $(4 x+3)(x-5)=$
$(\mathbf{a x}+\mathbf{b})(\mathbf{c x}+\mathbf{d})=\mathbf{a c} \mathrm{x}^{2}+(\mathbf{a d}+\mathrm{bc}) \mathbf{x}+\mathbf{b d}$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.
4. $(3 x-4)(2 x-5)=$
5. $(2 x+3)(3 x-2)=$
6. $(4 x+3)(x-5)=$
$(\mathbf{a x}+\mathbf{b})(\mathbf{c x}+\mathbf{d})=\mathbf{a c} \mathbf{x}^{2}+(\mathbf{a d}+b c) \mathbf{x}+\mathbf{b d}$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.
4. $(\underset{\sim}{3 x-4)(2 x-5)}=$
5. $(2 x+3)(3 x-2)=$
6. $(4 x+3)(x-5)=$
$(\mathbf{a x}+\mathrm{b})(\mathbf{c x}+\mathbf{d})=\mathbf{a c} \mathbf{x}^{2}+(\mathbf{a d}+\mathrm{bc}) \mathbf{x}+\mathbf{b d}$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.
4. $(3 x-4)(2 x-5)=6 x^{2}$
5. $(2 x+3)(3 x-2)=$
6. $(4 x+3)(x-5)=$
$(\mathbf{a x}+\mathrm{b})(\mathbf{c x}+\mathbf{d})=\mathbf{a c} \mathbf{x}^{2}+(\mathbf{a d}+\mathrm{bc}) \mathbf{x}+\mathbf{b d}$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.
4. $(3 x-4)(2 x-5)=6 x^{2}$
5. $(2 x+3)(3 x-2)=$
6. $(4 x+3)(x-5)=$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.
4. $(3 x-4)(2 x-5)=6 x^{2}$
5. $(2 x+3)(3 x-2)=$
6. $(4 x+3)(x-5)=$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.
4. $(\sqrt{-15 x-4)(2 x-5})=6 x^{2}$
5. $(2 x+3)(3 x-2)=$
6. $(4 x+3)(x-5)=$
$(\mathbf{a x}+\mathrm{b})(\mathbf{c x}+\mathbf{d})=\mathbf{a c} \mathbf{x}^{2}+(\mathbf{a d}+b c) \mathbf{x}+\mathbf{b d}$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.
4. $\left(3 x-\frac{-15 x}{-8 x}\right)(2 x-5)=6 x^{2}$
5. $(2 x+3)(3 x-2)=$
6. $(4 x+3)(x-5)=$
$(\mathbf{a x}+\mathrm{b})(\mathbf{c x}+\mathbf{d})=\mathbf{a c} \mathbf{x}^{2}+(\mathbf{a d}+b c) \mathbf{x}+\mathbf{b d}$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.
4. $(3 x-\underset{-8 x}{-4)(2 x}-5)=-6 x^{2}-23 x$
5. $(2 x+3)(3 x-2)=$
6. $(4 x+3)(x-5)=$
$(\mathbf{a x}+\mathbf{b})(\mathbf{c x}+\mathbf{d})=\mathbf{a c} \mathrm{x}^{2}+(\mathbf{a d}+b c) \mathbf{x}+\mathbf{b d}$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.
4. $(3 x-4)(2 x-5)=6 x^{2}-23 x$
5. $(2 x+3)(3 x-2)=$
6. $(4 x+3)(x-5)=$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.
4. $(3 x-4)(2 x-5)=6 x^{2}-23 x$
5. $(2 x+3)(3 x-2)=$
6. $(4 x+3)(x-5)=$
$(a x+b)(c x+d)=\mathbf{a c} x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.
4. $(3 x-4)(2 x-5)=6 x^{2}-23 x$
5. $(2 x+3)(3 x-2)=$
6. $(4 x+3)(x-5)=$
$(\mathbf{a x}+\mathbf{b})(\mathbf{c x}+\mathbf{d})=\mathbf{a c} \mathbf{x}^{2}+(\mathbf{a d}+b c) \mathbf{x}+\mathbf{b d}$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.
4. $(3 x-4)(2 x-5)=6 x^{2}-23 x+20$
5. $(2 x+3)(3 x-2)=$
6. $(4 x+3)(x-5)=$
$(a x+b)(c x+d)=\mathbf{a c} x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.
4. $(3 x-4)(2 x-5)=6 x^{2}-23 x+20$
5. $(2 x+3)(3 x-2)=$
6. $(4 x+3)(x-5)=$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.
4. $(3 x-\underset{-8 x}{-4)(2 x-5})=6 x^{2}-23 x+20$
5. $(2 x+3)(3 x-2)=$
6. $(4 x+3)(x-5)=$
$(\mathbf{a x}+\mathrm{b})(\mathbf{c x}+\mathbf{d})=\mathbf{a c} \mathbf{x}^{2}+(\mathbf{a d}+b c) \mathbf{x}+\mathbf{b d}$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.
4. $\left(3 x-\underset{-8 x}{-4)(2 x-5)}=-6 x^{2}-23 x+20\right.$
5. $(2 x+3)(3 x-2)=$
6. $(4 x+3)(x-5)=$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.
4. $\left(3 x-\underset{-8 x}{-4)(2 x-5)}=\underline{6 x^{2}-23 x+20}\right.$
5. $(2 x+3)(3 x-2)=$
6. $(4 x+3)(x-5)=$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.
4. $\left(\sqrt{(3 x-4)(2 x-5)}-6 x_{-8 x}^{-15 x}\right)=-23 x+20$
5. $(2 x+3)(3 x-2)=$
6. $(4 x+3)(x-5)=$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.
4. $\left(3 x-\underset{-8 x}{-4)(2 x-5)}=-6 x^{2}-23 x+20\right.$
5. $(2 x+3)(3 x-2)=$
6. $(4 x+3)(x-5)=$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.
4. $(3 x-\underset{-8 x}{-4)(2 x-5})=-6 x^{2}-23 x+20$
5. $(2 x+3)(3 x-2)=6 x^{2}$
6. $(4 x+3)(x-5)=$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.
4. $\left(3 x-\underset{-8 x}{-4)(2 x-5)}=\underline{6 x^{2}-23 x+20}\right.$
5. $(2 x+3)(3 x-2)=6 x^{2}$
6. $(4 x+3)(x-5)=$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.
4. $\left(3 x-\underset{-8 x}{-4)(2 x-5)}=\underline{6 x^{2}-23 x+20}\right.$
5. $(2 x+3)(3 x-2)=6 x^{2}$
6. $(4 x+3)(x-5)=$
$(a x+b)(c x+d)=\mathbf{a c} x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.
4. $(\sqrt{-8 x-4)(2 x-5})=-6 x^{2}-23 x+20$
5. $(2 \underset{-4 x}{-4})(3 x-2)=6 x^{2}$
6. $(4 x+3)(x-5)=$
$(a x+b)(c x+d)=\mathbf{a c} x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.
4. $(\sqrt{-8 x-4)(2 x-5})=-6 x^{2}-23 x+20$
5. $(2 x+\underset{9 x}{3)(3 x-2})=6 x^{2}$
6. $(4 x+3)(x-5)=$
$(a x+b)(c x+d)=\mathbf{a c} x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.
4. $\left(\sqrt{(3 x-4)(2 x-5)}-\frac{-15 x}{-8 x}\right.$
5. $\left(2 x+\underset{9 x}{\frac{-4 x}{3 x}(3 x-2}\right)=-6 x^{2}+5 x$
6. $(4 x+3)(x-5)=$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.
4. $\left(3 x-\underset{-8 x}{-4)(2 x-5)}=\underline{6 x^{2}-23 x+20}\right.$
5. $(2 x+3)(3 x-2)=6 x^{2}+5 x$
6. $(4 x+3)(x-5)=$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.
4. $(3 x-4)(2 x-5)=-6 x^{2}-23 x+20$
5. $(2 x+3)(3 x-2)=6 x^{2}+5 x$
6. $(4 x+3)(x-5)=$
$(a x+b)(c x+d)=\mathbf{a c} x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.
4. $(3 x-4)(2 x-5)=-6 x^{2}-23 x+20$
5. $(2 x+3)(3 x-2)=6 x^{2}+5 x$
6. $(4 x+3)(x-5)=$
$(a x+b)(c x+d)=\mathbf{a c} x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.
4. $\left(3 x-\underset{-8 x}{-4)(2 x-5)}=-6 x^{2}-23 x+20\right.$
5. $(2 x+3)(3 x-2)=6 x^{2}+5 x-6$
6. $(4 x+3)(x-5)=$
$(a x+b)(c x+d)=\mathbf{a c} x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.
4. $\left(3 x-\underset{-8 x}{-4)(2 x-5)}=-6 x^{2}-23 x+20\right.$
5. $(2 x+3)(3 x-2)=6 x^{2}+5 x-6$
6. $(4 x+3)(x-5)=$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.
4. $\left(\sqrt{(3 x-4)(2 x-5)}-\frac{-15 x}{-8 x}\right.$
5. $\left(2 x+\underset{9 x}{\frac{-4 x}{3 x}(3 x-2}\right)=6 x^{2}+5 x-6$
6. $(4 x+3)(x-5)=$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

6. $(4 x+3)(x-5)=$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

6. $(4 x+3)(x-5)=$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

6. $(4 x+3)(x-5)=$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

6. $(4 x+3)(x-5)=$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

6. $(4 x+3)(x-5)=4 x^{2}$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

6. $(4 x+3)(x-5)=4 x^{2}$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

6. $(4 x+3)(x-5)=4 x^{2}$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

6. $(4 x+3)(x-5)=4 x^{2}$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

6. $(4 x+3)(x-5)=4 x^{2}$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

6. $\left(4 x+\underset{3 x}{\left.\frac{-20 x}{3(x}-5\right)}=-4 x^{2}-17 x\right.$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

6. $(4 x+3)(x-5)=4 x^{2}-17 x$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

6. $(4 x+3)(x-5)=4 x^{2}-17 x$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

6. $(4 x+3)(x-5)=4 x^{2}-17 x$
$(\mathbf{a x}+\mathrm{b})(\mathbf{c x}+\mathbf{d})=\mathbf{a c} \mathbf{x}^{2}+(\mathbf{a d}+b c) \mathbf{x}+\mathbf{b d}$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

6. $(4 x+3)(x-5)=4 x^{2}-17 x-15$
$(\mathbf{a x}+\mathbf{b})(\mathbf{c x}+\mathbf{d})=\mathbf{a c} \mathbf{x}^{2}+(\mathbf{a d}+b c) \mathbf{x}+\mathbf{b d}$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

6. $(4 x+3)(x-5)=4 x^{2}-17 x-15$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

6. $\left(4 x+\underset{3 x}{3)(x-5)}-4 x^{2}-17 x-15\right.$
$(\mathbf{a x}+\mathrm{b})(\mathbf{c x}+\mathbf{d})=\mathbf{a c} \mathbf{x}^{2}+(\mathbf{a d}+\mathrm{bc}) \mathbf{x}+\mathbf{b d}$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

$(\mathbf{a x}+\mathrm{b})(\mathbf{c x}+\mathbf{d})=\mathbf{a c} \mathbf{x}^{2}+(\mathbf{a d}+b c) \mathbf{x}+\mathbf{b d}$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.
4. $(3 x-4)(2 x-5)=6 x^{2}-23 x+20$
5. $(2 x+3)(3 x-2)=6 x^{2}+5 x-6$
6. $(4 x+3)(x-5)=4 x^{2}-17 x-15$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.
7. $(4 x-3)(5 x+3)=$
8. $(6 x-1)(8 x+3)=$
$(\mathbf{a x}+\mathbf{b})(\mathbf{c x}+\mathbf{d})=\mathbf{a c} \mathrm{x}^{2}+(\mathbf{a d}+\mathrm{bc}) \mathbf{x}+\mathbf{b d}$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

$$
\text { 7. }(4 x-3)(5 x+3)=
$$

$$
\text { 8. }(6 x-1)(8 x+3)=
$$

$(\mathbf{a x}+\mathrm{b})(\mathbf{c x}+\mathbf{d})=\mathbf{a c} \mathbf{x}^{2}+(\mathbf{a d}+\mathrm{bc}) \mathbf{x}+\mathbf{b d}$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

$$
\text { 7. }(4 x-3)(5 x+3)=
$$

$$
\text { 8. }(6 x-1)(8 x+3)=
$$

$(\mathbf{a x}+\mathrm{b})(\mathbf{c x}+\mathbf{d})=\mathbf{a c} \mathbf{x}^{2}+(\mathbf{a d}+\mathrm{bc}) \mathbf{x}+\mathbf{b d}$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

## 7. $(4 x-3)(5 x+3)=$

8. $(6 x-1)(8 x+3)=$
$(\mathbf{a x}+\mathrm{b})(\mathbf{c x}+\mathbf{d})=\mathbf{a c} \mathbf{x}^{2}+(\mathbf{a d}+\mathrm{bc}) \mathbf{x}+\mathbf{b d}$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

$$
\text { 7. }(4 x-3)(5 x+3)=20 x^{2}
$$

$$
\text { 8. }(6 x-1)(8 x+3)=
$$

$(\mathbf{a x}+\mathbf{b})(\mathbf{c x}+\mathbf{d})=\mathbf{a c} \mathbf{x}^{2}+(\mathbf{a d}+b c) \mathbf{x}+\mathbf{b d}$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

$$
\text { 7. }(4 x-3)(5 x+3)=20 x^{2}
$$

$$
\text { 8. }(6 x-1)(8 x+3)=
$$

$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

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\text { 7. }(4 x-3)(5 x+3)=20 x^{2}
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\text { 8. }(6 x-1)(8 x+3)=
$$

$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

$$
\text { 7. }(4 x-3)(5 x+3)=20 x^{2}
$$

$$
\text { 8. }(6 x-1)(8 x+3)=
$$

$(a x+b)(c x+d)=\mathbf{a c x} \mathbf{x}^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

$$
\text { 7. }\left(\frac{12 x}{(4 x-3)(5 x+3)} \underset{-15 x}{\frac{15 x}{2}}=\underline{20 x^{2}}\right.
$$

$$
\text { 8. }(6 x-1)(8 x+3)=
$$

$(\mathbf{a x}+\mathbf{b})(\mathbf{c x}+\mathbf{d})=\mathbf{a c} \mathbf{x}^{2}+(\mathbf{a d}+b c) \mathbf{x}+\mathbf{b d}$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

$$
\text { 7. }\left(4 x-\underset{-15 x}{\left.\frac{32 x}{3}\right)(5 x+3}\right)=20 x^{2}-3 x
$$

$$
\text { 8. }(6 x-1)(8 x+3)=
$$

$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

$$
\text { 7. }(4 x-3)(5 x+3)=20 x^{2}-3 x
$$

$$
\text { 8. }(6 x-1)(8 x+3)=
$$

$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

$$
\text { 7. }(4 x-3)(5 x+3)=20 x^{2}-3 x
$$

$$
\text { 8. }(6 x-1)(8 x+3)=
$$

$\qquad$
$(\mathbf{a x}+\mathbf{b})(\mathbf{c x}+\mathbf{d})=\mathbf{a c} \mathbf{x}^{2}+(\mathbf{a d}+b c) \mathbf{x}+\mathbf{b d}$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

$$
\text { 7. }(4 x-3)(5 x+3)=20 x^{2}-3 x
$$

$$
\text { 8. }(6 x-1)(8 x+3)=
$$

$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

## 7. $(4 x-3)(5 x+3)=20 x^{2}-3 x-9$

8. $(6 x-1)(8 x+3)=$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

$$
\text { 7. }(4 x-3)(5 x+3)=20 x^{2}-3 x-9
$$

8. $(6 x-1)(8 x+3)=$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

$$
\text { 7. } \underset{(4 x-\underset{-15 x}{3)(5 x}+3)}{12 x}=\xrightarrow[20 x^{2}-3 x-9]{ }
$$

8. $(6 x-1)(8 x+3)=$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

8. $(6 x-1)(8 x+3)=$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

$$
\text { 7. }(4 x-\underset{-15 x}{3)(5 x}+3)=220 x^{2}-3 x-9
$$

$$
\text { 8. }(6 x-1)(8 x+3)=
$$

$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

$$
\text { 7. }(4 x-\underset{-15 x}{3)(5 x+3 x})=220 x^{2}-3 x-9
$$

$$
\text { 8. }(6 x-1)(8 x+3)=
$$

$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

$$
\text { 7. }(4 x-\underset{-15 x}{3)(5 x}+3)=220 x^{2}-3 x-9
$$

$$
\text { 8. }(6 x-1)(8 x+3)=
$$

$$
(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d
$$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

$$
\text { 7. }(4 x-\underset{-15 x}{3)(5 x+3 x})=220 x^{2}-3 x-9
$$

$$
\text { 8. }(6 x-1)(8 x+3)=48 x^{2}
$$

$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

$$
\text { 7. }(4 x-\underset{-15 x}{3)(5 x+3 x})=220 x^{2}-3 x-9
$$

$$
\text { 8. }(6 x-1)(8 x+3)=48 x^{2}
$$

$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

$$
\text { 7. }(4 x-\underset{-15 x}{3)(5 x+3 x})=220 x^{2}-3 x-9
$$

$$
\text { 8. }(6 x-1)(8 x+3)=48 x^{2}
$$

$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

$$
\begin{aligned}
& \text { 7. }(4 x-\underbrace{3)(5 x}_{-15 x}+3) \\
& \frac{12 x}{18 x} \\
& \text { 8. }(6 x-1)(8 x+3)=48 x^{2}-3 x-9 \\
& \left(6 x-2 x^{2}\right.
\end{aligned}
$$

$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

$(\mathbf{a x}+\mathrm{b})(\mathbf{c x}+\mathbf{d})=\mathbf{a c} \mathbf{x}^{2}+(\mathbf{a d}+b c) \mathbf{x}+\mathbf{b d}$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

$(\mathbf{a x}+\mathrm{b})(\mathbf{c x}+\mathbf{d})=\mathbf{a c} \mathbf{x}^{2}+(\mathbf{a d}+b c) \mathbf{x}+\mathbf{b d}$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

$$
\text { 7. }(4 x-\underset{-15 x}{3)(5 x+3 x})=220 x^{2}-3 x-9
$$

$$
\text { 8. }(6 x-1)(8 x+3)=48 x^{2}+10 x
$$

$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

$$
\text { 7. }\left(4 x-\underset{-15 x}{\left.\frac{3 x}{3}\right)(5 x+3}\right)=220 x^{2}-3 x-9
$$

$$
\text { 8. }(6 x-1)(8 x+3)=48 x^{2}+10 x
$$

$(\mathbf{a x}+\mathbf{b})(\mathbf{c x}+\mathbf{d})=\mathbf{a c} \mathbf{x}^{2}+(\mathbf{a d}+b c) \mathbf{x}+\mathbf{b d}$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

$$
\text { 7. }(4 x-\underset{-15 x}{3)(5 x+3 x})=220 x^{2}-3 x-9
$$

$$
\text { 8. }(6 x-1)(8 x+3)=48 x^{2}+10 x
$$

$(\mathbf{a x}+\mathrm{b})(\mathbf{c x}+\mathbf{d})=\mathbf{a c} \mathbf{x}^{2}+(\mathbf{a d}+b c) \mathbf{x}+\mathbf{b d}$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

$$
\text { 7. }(4 x-\underset{-15 x}{3)(5 x+3 x})=220 x^{2}-3 x-9
$$

$$
\text { 8. }(6 x-1)(8 x+3)=48 x^{2}+10 x-3
$$

$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

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Perform the indicated operations.

$$
\text { 7. }(4 x-\underset{-15 x}{3)(5 x}+3)=220 x^{2}-3 x-9
$$

$$
\text { 8. }(6 x-1)(8 x+3)=48 x^{2}+10 x-3
$$

$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

$(\mathbf{a x}+\mathbf{b})(\mathbf{c x}+\mathbf{d})=\mathbf{a c} \mathrm{x}^{2}+(\mathbf{a d}+\mathrm{bc}) \mathbf{x}+\mathbf{b d}$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.

$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Class Worksheet \#2 Unit 6

Perform the indicated operations.
7. $(4 x-3)(5 x+3)=20 x^{2}-3 x-9$
8. $(6 x-1)(8 x+3)=48 x^{2}+10 x-3$
$(a x+b)(c x+d)=a c x^{2}+(a d+b c) x+b d$

## Algebra II Factoring Trinomials - Type 2

## Algebra II Factoring Trinomials - Type 2

Consider the following equations written as factoring problems.

## Algebra II Factoring Trinomials - Type 2

Consider the following equations written as factoring problems.

$$
\begin{array}{l|l}
6 x^{2}+29 x+35=(2 x+5)(3 x+7) & 6 x^{2}-25 x+14=(3 x-2)(2 x-7) \\
\hline 20 x^{2}+21 x-5=(5 x-1)(4 x+5) & 8 x^{2}-26 x-45=(2 x-9)(4 x+5)
\end{array}
$$

$$
E x^{2}+\mathbf{F x}+\mathbf{G}=(\mathbf{a x}+\mathbf{b})(\mathbf{c x}+\mathbf{d})
$$

## Algebra II Factoring Trinomials - Type 2

Consider the following equations written as factoring problems.

$$
\begin{array}{l|l}
\hline 6 x^{2}+29 x+35=(2 x+5)(3 x+7) & 6 x^{2}-25 x+14=(3 x-2)(2 x-7) \\
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\end{array}
$$

$$
E x^{2}+\mathbf{F x}+\mathbf{G}=(\mathbf{a x}+\mathbf{b})(\mathbf{c x}+\mathbf{d})
$$

The purpose of this part of this lesson is to demonstrate how to factor 'type 2' trinomials.

## Algebra II Factoring Trinomials - Type 2

## Consider the following equations written as factoring problems.

$6 x^{2}+29 x+35=(2 x+5)(3 x+7)$
$20 x^{2}+21 x-5=(5 x-1)(4 x+5)$

$$
6 x^{2}-25 x+14=(3 x-2)(2 x-7)
$$

$$
8 x^{2}-26 x-45=(2 x-9)(4 x+5)
$$

$$
E x^{2}+\mathbf{F x}+\mathbf{G}=(\mathbf{a x}+\mathbf{b})(\mathbf{c x}+\mathbf{d})
$$

The purpose of this part of this lesson is to demonstrate how to factor 'type 2 ' trinomials. These are trinomials where the leading coefficient is not 1 .

## Algebra II Factoring Trinomials - Type 2

## Consider the following equations written as factoring problems.

$6 x^{2}+29 x+35=(2 x+5)(3 x+7)$
$20 x^{2}+21 x-5=(5 x-1)(4 x+5)$

$$
6 x^{2}-25 x+14=(3 x-2)(2 x-7)
$$

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$$
6 x^{2}-25 x+14=(3 x-2)(2 x-7)
$$

$$
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$$
6 x^{2}-25 x+14=(3 x-2)(2 x-7)
$$

$$
8 x^{2}-26 x-45=(2 x-9)(4 x+5)
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$$
E x^{2}+\mathbf{F x}+\mathbf{G}=(\mathbf{a x}+\mathbf{b})(\mathbf{c x}+\mathbf{d})
$$

The purpose of this part of this lesson is to demonstrate how to factor 'type 2 ' trinomials. These are trinomials where the leading coefficient is not 1 . In the last equation above, there are two important relationships that must be understood:

## Algebra II Factoring Trinomials - Type 2

## Consider the following equations written as factoring problems.

$$
\begin{array}{l|l}
\hline 6 x^{2}+29 x+35=(2 x+5)(3 x+7) & 6 x^{2}-25 x+14=(3 x-2)(2 x-7) \\
\hline 20 x^{2}+21 x-5=(5 x-1)(4 x+5) & 8 x^{2}-26 x-45=(2 x-9)(4 x+5)
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$$

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\begin{array}{l|l}
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\end{array}
$$

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$$

The purpose of this part of this lesson is to demonstrate how to factor 'type 2 ' trinomials. These are trinomials where the leading coefficient is not 1 . In the last equation above, there are two important relationships that must be understood: (1) $\mathbf{a c}=\mathbf{E}$

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## Consider the following equations written as factoring problems.

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## Consider the following equations written as factoring problems.



$$
6 x^{2}-25 x+14=(3 x-2)(2 x-7)
$$

$$
20 x^{2}+21 x-5=(5 x-1)(4 x+5)
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$$
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$$

$$
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## Algebra II Factoring Trinomials - Type 2

## Consider the following equations written as factoring problems.

$$
\begin{aligned}
& 6 x^{2}+29 x+35=\stackrel{a}{(2 x+5)(3 x+7)}
\end{aligned}
$$

$$
\begin{aligned}
& 20 x^{2}+21 x-5=\stackrel{a}{(5 x-1)(4 x+5)} \\
& 8 x^{2}-26 x-45=(2 x-9)(4 x+5)
\end{aligned}
$$

$$
E x^{2}+\mathbf{F x}+\mathbf{G}=(\mathbf{a x}+\mathbf{b})(\mathbf{c x}+\mathbf{d})
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## Algebra II Factoring Trinomials - Type 2

## Consider the following equations written as factoring problems.



$$
6 x^{2}-25 x+14=(3 x-2)(2 x-7)
$$

$$
20 x^{2}+21 x-5=\left(\frac{a}{5} x-1\right)(4 x+5)
$$

$$
\left.8 x^{2}-26 x-45=\stackrel{a}{(2 x}-9\right)(4 x+5)
$$

$$
E x^{2}+\mathbf{F x}+\mathbf{G}=(\mathbf{a x}+\mathbf{b})(\mathbf{c x}+\mathbf{d})
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\hline 20 x^{2}+21 x-5=(5 x-1)(4 x+5) & 8 x^{2}-26 x-45=(2 x-9)(4 x+5)
\end{array}
$$

$$
E x^{2}+\mathbf{F x}+\mathbf{G}=(\mathbf{a x}+\mathbf{b})(\mathbf{c x}+\mathbf{d})
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\begin{array}{l|l}
\hline 6 x^{2}+29 x+35=(2 x+5)(3 x+7) & 6 x^{2}-25 x+14=(3 x-2)(2 x-7) \\
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\end{array}
$$

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E x^{2}+\mathbf{F x}+\mathbf{G}=(\mathbf{a x}+\mathbf{b})(\mathbf{c x}+\mathbf{d})
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## Algebra II Factoring Trinomials - Type 2

## Consider the following equations written as factoring problems.



$$
6 x^{2}-25 x+14=(3 x-2)(2 x-7)
$$

$$
20 x^{2}+21 x-5=(5 x-1)(4 x+5)
$$

$$
8 x^{2}-26 x-45=(2 x-9)(4 x+5)
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## Algebra II Factoring Trinomials - Type 2

## Consider the following equations written as factoring problems.

| $6 x^{2}+29 x+35=(2 x+5)\left(3 x+\frac{d}{7}\right)$ | $6 x^{2}-25 x+14=(3 x-2)(2 x-7)$ |
| :---: | :---: |
|  | $8 x^{2}-26 x-45=(2 x-9)(4 x+5)$ |

$$
E x^{2}+\mathbf{F x}+\mathbf{G}=(\mathbf{a x}+\mathbf{b})(\mathbf{c x}+\mathbf{d})
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## Algebra II Factoring Trinomials - Type 2

## Consider the following equations written as factoring problems.


$20 x^{2}+21 x-5=(5 x-1)(4 x+5)$

$$
8 x^{2}-26 x-45=(2 x-9)(4 x+5)
$$

$$
E x^{2}+\mathbf{F x}+\mathbf{G}=(\mathbf{a x}+\mathbf{b})(\mathbf{c x}+\mathbf{d})
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## Algebra II Factoring Trinomials - Type 2

## Consider the following equations written as factoring problems.


$6 x^{2}-25 x+14=(3 x-\stackrel{\downarrow}{2})\left(2 x-\frac{d}{7}\right)$
$20 x^{2}+21 x-5=(5 x-1)(4 x+5)$

$$
8 x^{2}-26 x-45=(2 x-9)(4 x+5)
$$

$$
E x^{2}+\mathbf{F x}+\mathbf{G}=(\mathbf{a x}+\mathbf{b})(\mathbf{c x}+\mathbf{d})
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## Consider the following equations written as factoring problems.

$$
\begin{array}{l|l}
\hline 6 x^{2}+29 x+35=(2 x+5)(3 x+7) & 6 x^{2}-25 x+14=(3 x-2)(2 x-7) \\
\hline 20 x^{2}+21 x-5=(5 x-1)(4 x+5) & 8 x^{2}-26 x-45=(2 x-9)(4 x+5)
\end{array}
$$

$$
E x^{2}+\mathbf{F x}+\mathbf{G}=(\mathbf{a x}+\mathbf{b})(\mathbf{c x}+\mathbf{d})
$$

The purpose of this part of this lesson is to demonstrate how to factor 'type 2 ' trinomials. These are trinomials where the leading coefficient is not 1 . In the last equation above, there are two important relationships that must be understood: (1) $\mathbf{a c}=\mathbf{E}$ and (2) $\mathbf{b d}=\mathbf{G}$.

## Algebra II Factoring Trinomials - Type 2

## Consider the following equations written as factoring problems.

$$
\begin{array}{l|l}
\hline 6 x^{2}+29 x+35=(2 x+5)(3 x+7) & 6 x^{2}-25 x+14=(3 x-2)(2 x-7) \\
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$$

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The purpose of this part of this lesson is to demonstrate how to factor 'type $2^{\prime}$ trinomials. These are trinomials where the leading coefficient is not 1 . In the last equation above, there are two important relationships that must be understood: (1) $\mathbf{a c}=\mathbf{E}$ and (2) $\mathbf{b d}=\mathbf{G}$. In many problems, there will be several values of $a, b, c$, and $d$ that may work. The correct combination is the one in which $\mathbf{a d}+\mathbf{b c}=\mathbf{F}$ !!

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Consider the following equations written as factoring problems.


$$
6 x^{2}-25 x+14=(3 x-2)(2 x-7)
$$

$$
8 x^{2}-26 x-45=(2 x-9)(4 x+5)
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## Algebra II Factoring Trinomials - Type 2

Consider the following equations written as factoring problems.


$$
20 x^{2}+21 x-5=(5 x-1)(4 x+5)
$$

$$
6 x^{2}-25 x+14=(3 x-2)(2 x-7)
$$

$$
8 x^{2}-26 x-45=(2 x-9)(4 x+5)
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20 x^{2}+21 x-5=(5 x-1)(4 x+5) & 8 x^{2}-26 x-45=(2 x-9)(4 x+5) \\
\hline-4 x &
\end{array}
$$

$$
E x^{2}+\mathbf{F x}+\mathbf{G}=(\mathbf{a x}+\mathbf{b})(\mathbf{c x}+\mathbf{d})
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## Algebra II Factoring Trinomials - Type 2

## Consider the following equations written as factoring problems.

$6 x^{2}+29 x+35=(2 x+5)(3 x+7)$

$$
20 x^{2}+21 x-5=(5 x-1)(4 x+5)
$$

$$
6 x^{2}-25 x+14=(3 x-\underset{-4 x}{-21 x}(2 x-7)
$$

$$
8 x^{2}-26 x-45=(2 x-9)(4 x+5)
$$

$$
E x^{2}+F x+G=(a x+b)(c x+d)
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\hline-36 x
\end{array}
$$

$$
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E x^{2}+F x+G=(a x+b)(c x+d)
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Algebra II Class Worksheet \#2 Unit 6 Factor each of the following.
9. $3 x^{2}+10 x+8=$
10. $18 x^{2}+21 x+5=$
11. $3 x^{2}-23 x+30=$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

Algebra II Class Worksheet \#2 Unit 6 Factor each of the following.
9. $3 x^{2}+10 x+8=$
10. $18 x^{2}+21 x+5=$
11. $3 \mathrm{x}^{2}-23 \mathrm{x}+30=$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

Algebra II Class Worksheet \#2 Unit 6 Factor each of the following.

$$
\text { 9. } 3 x^{2}+10 x+8=(3 x \quad)(x \quad)
$$

10. $18 x^{2}+21 x+5=$
11. $3 x^{2}-23 x+30=$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

Algebra II Class Worksheet \#2 Unit 6 Factor each of the following.

$$
\text { 9. } 3 x^{2}+10 x+8=(3 x+4)(x+2)
$$

10. $18 x^{2}+21 x+5=$
11. $3 x^{2}-23 x+30=$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

Algebra II Class Worksheet \#2 Unit 6
Factor each of the following.

$$
\text { 9. } 3 x^{2}+10 x+8=\frac{(3 x+4)(x+2)}{(x)}
$$

10. $18 x^{2}+21 x+5=$
11. $3 x^{2}-23 x+30=$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

Algebra II Class Worksheet \#2 Unit 6
Factor each of the following.

$$
\text { 9. } 3 x^{2}+10 x+8=\frac{(3 x+4)(x+2)}{4 x}
$$

10. $18 x^{2}+21 x+5=$
11. $3 x^{2}-23 x+30=$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

Algebra II Class Worksheet \#2 Unit 6 Factor each of the following.

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\text { 9. } 3 x^{2}+10 x+8=(3 x+4)(x+2)
$$

10. $18 x^{2}+21 x+5=$
11. $3 x^{2}-23 x+30=$

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& E x^{2}+F x+G=(a x+b)(c x+d) \\
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\end{aligned}
$$

Algebra II Class Worksheet \#2 Unit 6 Factor each of the following.

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\text { 9. } 3 x^{2}+10 x+8=(3 x+4)(x+2)
$$

10. $18 x^{2}+21 x+5=$
11. $3 x^{2}-23 x+30=$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

Algebra II Class Worksheet \#2 Unit 6 Factor each of the following.

$$
\text { 9. } 3 x^{2}+10 x+8=(3 x+4)(x+2)
$$

10. $18 x^{2}+21 x+5=(3 x \quad)(6 x \quad)$
11. $3 x^{2}-23 x+30=$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

Algebra II Class Worksheet \#2 Unit 6
Factor each of the following.

$$
\text { 9. } 3 x^{2}+10 x+8=(3 x+4)(x+2)
$$

10. $18 x^{2}+21 x+5=(3 x+1)(6 x+5)$
11. $3 x^{2}-23 x+30=$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

Algebra II Class Worksheet \#2 Unit 6
Factor each of the following.

$$
\begin{aligned}
& \text { 9. } 3 x^{2}+10 x+8=\frac{(3 x+4)(x+2)}{15 x} \\
& \text { 10. } 18 x^{2}+21 x+5=\frac{(3 x+\underbrace{1)(6 x+5}_{6 x})}{(2)}
\end{aligned}
$$

11. $3 x^{2}-23 x+30=$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

Algebra II Class Worksheet \#2 Unit 6
Factor each of the following.

$$
\begin{aligned}
& \text { 9. } 3 x^{2}+10 x+8=\frac{(3 x+4)(x+2)}{15 x} \\
& \text { 10. } 18 x^{2}+21 x+5=\frac{(3 x+1)(6 x+5)}{6 x}
\end{aligned}
$$

11. $3 \mathrm{x}^{2}-23 \mathrm{x}+30=$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
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## Algebra II Class Worksheet \#2 Unit 6

Factor each of the following.

$$
\text { 9. } 3 x^{2}+10 x+8=(3 x+4)(x+2)
$$

10. $18 x^{2}+21 x+5=(3 x+1)(6 x+5)$
11. $3 x^{2}-23 x+30=$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

## Algebra II Class Worksheet \#2 Unit 6

Factor each of the following.

$$
\text { 9. } 3 x^{2}+10 x+8=(3 x+4)(x+2)
$$

$$
\text { 10. } 18 x^{2}+21 x+5=(3 x+1)(6 x+5)
$$

11. $3 x^{2}-23 x+30=$

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\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
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Factor each of the following.

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\text { 9. } 3 x^{2}+10 x+8=(3 x+4)(x+2)
$$

$$
\text { 10. } 18 x^{2}+21 x+5=(3 x+1)(6 x+5)
$$

11. $3 x^{2}-23 x+30=(3 x \quad)(x \quad)$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

Algebra II Class Worksheet \#2 Unit 6
Factor each of the following.

$$
\text { 9. } 3 x^{2}+10 x+8=(3 x+4)(x+2)
$$

$$
\text { 10. } 18 x^{2}+21 x+5=(3 x+1)(6 x+5)
$$

11. $3 x^{2}-23 x+30=(3 x-5)(x-6)$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

Algebra II Class Worksheet \#2 Unit 6
Factor each of the following.

$$
\text { 9. } 3 x^{2}+10 x+8=(3 x+4)(x+2)
$$

10. $18 x^{2}+21 x+5=(3 x+1)(6 x+5)$
11. $3 x^{2}-23 x+30=\frac{-18 x}{(3 x-5)(x-6)}$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

Algebra II Class Worksheet \#2 Unit 6
Factor each of the following.

$$
\text { 9. } 3 x^{2}+10 x+8=(3 x+4)(x+2)
$$

10. $18 x^{2}+21 x+5=(3 x+1)(6 x+5)$
11. $3 x^{2}-23 x+30=\frac{(3 x-5)(x-6)}{-5 x}$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

## Algebra II Class Worksheet \#2 Unit 6

Factor each of the following.

$$
\text { 9. } 3 x^{2}+10 x+8=(3 x+4)(x+2)
$$

10. $18 x^{2}+21 x+5=(3 x+1)(6 x+5)$
11. $3 x^{2}-23 x+30=(3 x-5)(x-6)$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

Algebra II Class Worksheet \#2 Unit 6
Factor each of the following.
12. $5 x^{2}-22 x+8=$
13. $6 x^{2}-13 x-28=$
14. $35 x^{2}-16 x-3=$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

Algebra II Class Worksheet \#2 Unit 6
Factor each of the following.
12. $5 x^{2}-22 x+8=$
13. $6 x^{2}-13 x-28=$
14. $35 x^{2}-16 x-3=$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

Algebra II Class Worksheet \#2 Unit 6
Factor each of the following.

$$
\text { 12. } 5 x^{2}-22 x+8=(5 x \quad)(x \quad)
$$

13. $6 x^{2}-13 x-28=$
14. $35 x^{2}-16 x-3=$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

Algebra II Class Worksheet \#2 Unit 6
Factor each of the following.

$$
\text { 12. } 5 x^{2}-22 x+8=(5 x-2)(x-4)
$$

13. $6 x^{2}-13 x-28=$
14. $35 x^{2}-16 x-3=$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

Algebra II Class Worksheet \#2 Unit 6
Factor each of the following.

$$
\text { 12. } 5 x^{2}-22 x+8=\frac{(5 x-2)(x-4)}{-2 x}
$$

13. $6 x^{2}-13 x-28=$
14. $35 x^{2}-16 x-3=$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
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13. $6 x^{2}-13 x-28=$
14. $35 x^{2}-16 x-3=$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

Algebra II Class Worksheet \#2 Unit 6
Factor each of the following.
12. $5 x^{2}-22 x+8=(5 x-2)(x-4)$
13. $6 x^{2}-13 x-28=$
14. $35 x^{2}-16 x-3=$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

Algebra II Class Worksheet \#2 Unit 6 Factor each of the following.

$$
\text { 12. } 5 x^{2}-22 x+8=(5 x-2)(x-4)
$$

13. $6 x^{2}-13 x-28=$
14. $35 x^{2}-16 x-3=$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

Algebra II Class Worksheet \#2 Unit 6
Factor each of the following.

$$
\text { 12. } 5 x^{2}-22 x+8=(5 x-2)(x-4)
$$

13. $6 x^{2}-13 x-28=(3 x \quad)(2 x \quad)$
14. $35 x^{2}-16 x-3=$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

Algebra II Class Worksheet \#2 Unit 6
Factor each of the following.

$$
\text { 12. } 5 x^{2}-22 x+8=(5 x-2)(x-4)
$$

13. $6 x^{2}-13 x-28=(3 x+4)(2 x-7)$
14. $35 x^{2}-16 x-3=$

$$
\begin{aligned}
& E x^{2}+\mathbf{F x}+\mathbf{G}=(a x+b)(c x+d) \\
& E=\text { ac } \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

Algebra II Class Worksheet \#2 Unit 6
Factor each of the following.

$$
\begin{aligned}
& \text { 12. } 5 x^{2}-22 x+8=\frac{(5 x-2)(x-4)}{-21 x} \\
& \text { 13. } 6 x^{2}-13 x-28=\frac{(3 x+4)(2 x-7)}{8 x}
\end{aligned}
$$

14. $35 x^{2}-16 x-3=$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

Algebra II Class Worksheet \#2 Unit 6
Factor each of the following.

$$
\begin{aligned}
& \text { 12. } 5 x^{2}-22 x+8=\frac{(5 x-2)(x-4)}{-21 x} \\
& \text { 13. } 6 x^{2}-13 x-28=\frac{(3 x+4)(2 x-7)}{8 x}
\end{aligned}
$$

14. $35 x^{2}-16 x-3=$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

Algebra II Class Worksheet \#2 Unit 6
Factor each of the following.
12. $5 x^{2}-22 x+8=(5 x-2)(x-4)$
13. $6 x^{2}-13 x-28=(3 x+4)(2 x-7)$
14. $35 x^{2}-16 x-3=$

$$
\begin{aligned}
& E x^{2}+\mathbf{F x}+\mathbf{G}=(a x+b)(c x+d) \\
& E=\text { ac } \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

Algebra II Class Worksheet \#2 Unit 6
Factor each of the following.

$$
\text { 12. } 5 x^{2}-22 x+8=(5 x-2)(x-4)
$$

13. $6 x^{2}-13 x-28=(3 x+4)(2 x-7)$
14. $35 x^{2}-16 x-3=$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

Algebra II Class Worksheet \#2 Unit 6
Factor each of the following.

$$
\text { 12. } 5 x^{2}-22 x+8=(5 x-2)(x-4)
$$

$$
\text { 13. } 6 x^{2}-13 x-28=(3 x+4)(2 x-7)
$$

$$
\text { 14. } 35 x^{2}-16 x-3=(7 x \quad)(5 x \quad)
$$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

Algebra II Class Worksheet \#2 Unit 6
Factor each of the following.

$$
\text { 12. } 5 x^{2}-22 x+8=(5 x-2)(x-4)
$$

$$
\text { 13. } 6 x^{2}-13 x-28=(3 x+4)(2 x-7)
$$

$$
\text { 14. } 35 x^{2}-16 x-3=(7 x+1)(5 x-3)
$$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

Algebra II Class Worksheet \#2 Unit 6 Factor each of the following.

$$
\text { 12. } 5 x^{2}-22 x+8=(5 x-2)(x-4)
$$

13. $6 x^{2}-13 x-28=(3 x+4)(2 x-7)$
14. $35 x^{2}-16 x-3=\frac{(7 x+\underbrace{-21 x}_{5 x}(5 x-3)}{\left(x^{2}\right.}$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

Algebra II Class Worksheet \#2 Unit 6 Factor each of the following.

$$
\text { 12. } 5 x^{2}-22 x+8=(5 x-2)(x-4)
$$

13. $6 x^{2}-13 x-28=(3 x+4)(2 x-7)$
14. $35 x^{2}-16 x-3=\frac{(7 x+\underbrace{-21 x}_{5 x}(5 x-3)}{\left(x^{2}\right.}$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

Algebra II Class Worksheet \#2 Unit 6
Factor each of the following.

$$
\begin{aligned}
& \text { 12. } 5 x^{2}-22 x+8=\frac{(5 x-2)(x-4)}{\text { 13. }} 6 x^{2}-13 x-28=(3 x+4)(2 x-7)
\end{aligned}
$$

14. $35 x^{2}-16 x-3=(7 x+1)(5 x-3)$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

## Algebra II Class Worksheet \#2 Unit 6

Factor each of the following.
15. $30 x^{2}+13 x-3=$ $\qquad$
16. $21 x^{2}+5 x-6=$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

Algebra II Class Worksheet \#2 Unit 6 Factor each of the following.
15. $30 x^{2}+13 x-3=$
16. $21 x^{2}+5 x-6=$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

Algebra II Class Worksheet \#2 Unit 6 Factor each of the following.

$$
\text { 15. } 30 x^{2}+13 x-3=(5 x \quad)(6 x
$$

16. $21 x^{2}+5 x-6=$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

## Algebra II Class Worksheet \#2 Unit 6

 Factor each of the following.$$
\text { 15. } 30 x^{2}+13 x-3=(5 x+3)(6 x-1)
$$

16. $21 x^{2}+5 x-6=$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

Algebra II Class Worksheet \#2 Unit 6
Factor each of the following.

$$
\text { 15. } 30 x^{2}+13 x-3=\frac{(5 x+3)(6 x-1)}{18 x}
$$

16. $21 x^{2}+5 x-6=$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

Algebra II Class Worksheet \#2 Unit 6
Factor each of the following.

$$
\text { 15. } 30 x^{2}+13 x-3=\frac{(5 x+3)(6 x-1)}{18 x}
$$

16. $21 x^{2}+5 x-6=$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

## Algebra II Class Worksheet \#2 Unit 6

Factor each of the following.

$$
\text { 15. } 30 x^{2}+13 x-3=(5 x+3)(6 x-1)
$$

16. $21 x^{2}+5 x-6=$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

## Algebra II Class Worksheet \#2 Unit 6

Factor each of the following.

$$
\text { 15. } 30 x^{2}+13 x-3=(5 x+3)(6 x-1)
$$

16. $21 x^{2}+5 x-6=$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

## Algebra II Class Worksheet \#2 Unit 6

Factor each of the following.

$$
\text { 15. } 30 x^{2}+13 x-3=(5 x+3)(6 x-1)
$$

16. $21 x^{2}+5 x-6=(7 x \quad)(3 x \quad)$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

## Algebra II Class Worksheet \#2 Unit 6

Factor each of the following.

$$
\text { 15. } 30 x^{2}+13 x-3=(5 x+3)(6 x-1)
$$

$$
\text { 16. } 21 x^{2}+5 x-6=(7 x-3)(3 x+2)
$$

$$
\begin{aligned}
& E x^{2}+\mathbf{F x}+\mathbf{G}=(a x+b)(c x+d) \\
& E=\mathbf{a c} \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

Algebra II Class Worksheet \#2 Unit 6
Factor each of the following.

$$
\begin{aligned}
& \text { 15. } 30 x^{2}+13 x-3=\frac{(5 x+3)(6 x-1)}{14 x} \\
& \text { 16. } 21 x^{2}+5 x-6=\frac{(7 x-3)(3 x+2)}{-9 x}
\end{aligned}
$$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

Algebra II Class Worksheet \#2 Unit 6
Factor each of the following.

$$
\begin{aligned}
& \text { 15. } 30 x^{2}+13 x-3=\frac{(5 x+3)(6 x-1)}{14 x} \\
& \text { 16. } 21 x^{2}+5 x-6=\frac{(7 x-3)(3 x+2)}{-9 x}
\end{aligned}
$$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

## Algebra II Class Worksheet \#2 Unit 6

Factor each of the following.

$$
\text { 15. } 30 x^{2}+13 x-3=(5 x+3)(6 x-1)
$$

16. $21 x^{2}+5 x-6=(7 x-3)(3 x+2)$

$$
\begin{aligned}
& E x^{2}+F x+G=(a x+b)(c x+d) \\
& E=a c \quad G=b d \quad a d x+b c x=F x
\end{aligned}
$$

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.
17. $5 x^{2}+22 x+8=0$
18. $18 x^{2}+9 x+1=0$
19. $3 x^{2}-26 x+16=0$

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.
17. $5 x^{2}+22 x+8=0$
18. $18 x^{2}+9 x+1=0$
19. $3 x^{2}-26 x+16=0$

Step 1: Write the equation in standard form: $\mathbf{A x} \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication. If $P Q=0$, then $P=0$ or $Q=0$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.
17. $5 x^{2}+22 x+8=0$
18. $18 x^{2}+9 x+1=0$
19. $3 x^{2}-26 x+16=0$

Step 1: Write the equation in standard form: $\mathbf{A x} \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication. If $\mathbf{P Q}=\mathbf{0}$, then $\mathbf{P}=0$ or $\mathbf{Q}=\mathbf{0}$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.
17. $5 x^{2}+22 x+8=0 \quad$ 18. $18 x^{2}+9 x+1=0 \quad$ 19. $3 x^{2}-26 x+16=0$

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.
17. $5 x^{2}+22 x+8=0$
18. $18 x^{2}+9 x+1=0$
19. $3 x^{2}-26 x+16=0$

This equation is already in standard form.

Step 1: Write the equation in standard form: $A \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication. If $P Q=0$, then $P=0$ or $Q=0$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.
17. $5 x^{2}+22 x+8=0$
18. $18 x^{2}+9 x+1=0$
19. $3 x^{2}-26 x+16=0$

Step 1: Write the equation in standard form: $A \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication. If $P Q=0$, then $P=0$ or $Q=0$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.
17. $5 x^{2}+22 x+8=0$
18. $18 x^{2}+9 x+1=0$
19. $3 x^{2}-26 x+16=0$
$(5 x+2)(x+4)=0$

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.
17. $5 x^{2}+22 x+8=0$
18. $18 x^{2}+9 x+1=0$
19. $3 x^{2}-26 x+16=0$
$(5 x+2)(x+4)=0$

Step 1: Write the equation in standard form: $\mathbf{A x} \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication. If $\mathbf{P Q}=\mathbf{0}$, then $\mathbf{P}=\mathbf{0}$ or $\mathbf{Q}=\mathbf{0}$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{aligned}
& \text { 17. } 5 x^{2}+22 x+8=0 \\
& (5 x+2)(x+4)=0 \\
& 5 x+2=0 \text { or } x+4=0
\end{aligned}
$$

Step 1: Write the equation in standard form: $\mathbf{A x} \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication. If $\mathbf{P Q}=\mathbf{0}$, then $\mathbf{P}=\mathbf{0}$ or $\mathbf{Q}=\mathbf{0}$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{aligned}
& \text { 17. } 5 x^{2}+22 x+8=0 \\
& (5 x+2)(x+4)=0 \\
& 5 x+2=0 \text { or } x+4=0
\end{aligned}
$$

Step 1: Write the equation in standard form: $\mathbf{A x} \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication. If $\mathbf{P Q}=\mathbf{0}$, then $\mathbf{P}=\mathbf{0}$ or $\mathbf{Q}=\mathbf{0}$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{aligned}
& \text { 17. } 5 x^{2}+22 x+8=0 \quad \text { 18. } 18 x^{2}+9 x+1=0 \quad \text { 19. } 3 x^{2}-26 x+16=0 \\
& (5 x+2)(x+4)=0 \\
& 5 x+2=0 \text { or } x+4=0 \\
& 5 x=-2
\end{aligned}
$$

Step 1: Write the equation in standard form: $\mathbf{A x} \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication. If $\mathbf{P Q}=\mathbf{0}$, then $\mathbf{P}=\mathbf{0}$ or $\mathbf{Q}=\mathbf{0}$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{aligned}
& \text { 17. } 5 x^{2}+22 x+8=0 \\
& (5 x+2)(x+4)=0 \\
& 5 x+2=0 \text { or } x+4=0 \\
& 5 x=-2 \\
& x=\frac{-2}{5} \text { or } x=-4
\end{aligned}
$$

Step 1: Write the equation in standard form: $A x^{2}+B x+C=0$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication. If $\mathbf{P Q}=\mathbf{0}$, then $\mathbf{P}=\mathbf{0}$ or $\mathbf{Q}=\mathbf{0}$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{aligned}
& \text { 17. } 5 x^{2}+22 x+8=0 \quad \text { 18. } 18 x^{2}+9 x+1=0 \\
& \begin{array}{l}
(5 x+2)(x+4)=0 \\
5 x+2
\end{array} \\
& \begin{array}{l}
5 x=-2 \\
\text { or } x+4=0 \\
x
\end{array} \\
& \quad \frac{-2}{5} \text { or } x=-4
\end{aligned}
$$

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathrm{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{aligned}
& \text { 17. } 5 x^{2}+22 x+8=0 \\
& \begin{array}{l}
(5 x+2)(x+4)=0 \\
5 x+2=0 \text { or } x+4=0 \\
5 x=-2 \\
5 \\
x=\frac{-2}{5} \text { or } x=-4
\end{array}
\end{aligned}
$$

Step 1: Write the equation in standard form: $A x^{2}+B x+C=0$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\text { 17. } 5 x^{2}+22 x+8=0 \quad \text { 18. } 18 x^{2}+9 x+1=0 \quad \text { 19. } 3 x^{2}-26 x+16=0
$$

Step 1: Write the equation in standard form: $\mathbf{A x} \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication. If $\mathbf{P Q}=\mathbf{0}$, then $\mathbf{P}=\mathbf{0}$ or $\mathbf{Q}=\mathbf{0}$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{array}{cll}
\text { 17. } 5 x^{2}+22 x+8=0 & \text { 18. } 18 x^{2}+9 x+1=0 & \text { 19. } 3 x^{2}-26 x+16=0 \\
(5 x+2)(x+4)=0 & & \\
5 x+2=0 \text { or } x+4=0 & \text { This equation is already } \\
5 x=-2 & \text { in standard form. } \\
x=\frac{-2}{5} \text { or } x=-4 & &
\end{array}
$$

Step 1: Write the equation in standard form: $A x^{2}+B x+C=0$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication. If $\mathbf{P Q}=\mathbf{0}$, then $\mathbf{P}=0$ or $\mathbf{Q}=\mathbf{0}$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\text { 17. } 5 x^{2}+22 x+8=0 \quad \text { 18. } 18 x^{2}+9 x+1=0 \quad \text { 19. } 3 x^{2}-26 x+16=0
$$

Step 1: Write the equation in standard form: $\mathbf{A x} \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication. If $P Q=0$, then $P=0$ or $Q=0$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{array}{c|c}
\text { 17. } 5 x^{2}+22 x+8=0 & \text { 18. } 18 x^{2}+9 x+1=0 \\
(5 x+2)(x+4)=0 & (6 x+1)(3 x+1)=0 \\
5 x+2=0 \text { or } x+4=0 & \\
5 x=-2 \\
x=\frac{-2}{5} \text { or } x=-4 & \\
&
\end{array}
$$

Step 1: Write the equation in standard form: $A x^{2}+B x+C=0$
Step 2: Write the equation in factored form.
(Factor the polynomial $\left.\mathbf{A x}^{2}+\mathbf{B x}+\mathrm{C}.\right)$
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{array}{c|c}
\text { 17. } 5 x^{2}+22 x+8=0 & \text { 18. } 18 x^{2}+9 x+1=0 \\
(5 x+2)(x+4)=0 & (6 x+1)(3 x+1)=0 \\
5 x+2=0 \text { or } x+4=0 & \\
5 x=-2 \\
x=\frac{-2}{5} \text { or } x=-4 & \\
&
\end{array}
$$

Step 1: Write the equation in standard form: $A x^{2}+B x+C=0$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication. If $\mathbf{P Q}=\mathbf{0}$, then $\mathbf{P}=0$ or $\mathbf{Q}=\mathbf{0}$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{array}{ll}
\text { 17. } 5 x^{2}+22 x+8=0 & \text { 18. } 18 x^{2}+9 x+1=0 \\
(5 x+2)(x+4)=0 & (6 x+1)(3 x+1)=0 \\
5 x+2=0 \text { or } x+4=0 & 6 x+1=0 \text { or } 3 x+1=0 \\
5 x=-2 \\
x=\frac{-2}{5} \text { or } x=-4 &
\end{array}
$$

Step 1: Write the equation in standard form: $A x^{2}+B x+C=0$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication. If $\mathbf{P Q}=\mathbf{0}$, then $\mathbf{P}=0$ or $\mathbf{Q}=\mathbf{0}$.
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## Algebra II Class Worksheet \#2 Unit 6

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\begin{array}{ll}
\text { 17. } 5 x^{2}+22 x+8=0 & \text { 18. } 18 x^{2}+9 x+1=0 \\
(5 x+2)(x+4)=0 & (6 x+1)(3 x+1)=0 \\
5 x+2=0 \text { or } x+4=0 & 6 x+1=0 \text { or } 3 x+1=0 \\
5 x=-2 \\
x=\frac{-2}{5} \text { or } x=-4 &
\end{array}
$$

Step 1: Write the equation in standard form: $\mathbf{A x} \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication. If $\mathbf{P Q}=\mathbf{0}$, then $\mathbf{P}=\mathbf{0}$ or $\mathbf{Q}=\mathbf{0}$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{array}{ccc}
\text { 17. } 5 x^{2}+22 x+8=0 & \text { 18. } 18 x^{2}+9 x+1=0 & \text { 19. } 3 x^{2}-26 x+16=0 \\
(5 x+2)(x+4)=0 & (6 x+1)(3 x+1)=0 \\
5 x+2=0 \text { or } x+4=0 & 6 x+1=0 \text { or } 3 x+1=0 \\
5 x=-2 & 6 x=-1 \quad 3 x=-1 \\
x=\frac{-2}{5} \text { or } x=-4 & & \\
&
\end{array}
$$

Step 1: Write the equation in standard form: $\mathbf{A x} \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication. If $\mathbf{P Q}=\mathbf{0}$, then $\mathbf{P}=\mathbf{0}$ or $\mathbf{Q}=\mathbf{0}$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{array}{cc}
\text { 17. } 5 x^{2}+22 x+8=0 & \text { 18. } 18 x^{2}+9 x+1=0 \\
(5 x+2)(x+4)=0 & (6 x+1)(3 x+1)=0 \\
5 x+2=0 \text { or } x+4=0 & 6 x+1=0 \text { or } 3 x+1=0 \\
5 x=-2 & 6 x=-1 \quad 3 x=-1 \\
x=\frac{-2}{5} \text { or } x=-4 & x=\frac{-1}{6} \text { or } x=\frac{-1}{3}
\end{array}
$$

Step 1: Write the equation in standard form: $\mathbf{A x} \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication. If $\mathbf{P Q}=\mathbf{0}$, then $\mathbf{P}=\mathbf{0}$ or $\mathbf{Q}=\mathbf{0}$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

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\begin{array}{ccc}
\text { 17. } 5 x^{2}+22 x+8=0 & \text { 18. } 18 x^{2}+9 x+1=0 & \text { 19. } 3 x^{2}-26 x+16=0 \\
(5 x+2)(x+4)=0 & (6 x+1)(3 x+1)=0 \\
5 x+2=0 \text { or } x+4=0 & 6 x+1=0 \text { or } 3 x+1=0 \\
5 x=-2 & 6 x=-1 \quad 3 x=-1 \\
x=\frac{-2}{5} \text { or } x=-4 & x=\frac{-1}{6} \text { or } x=\frac{-1}{3}
\end{array}
$$

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{array}{cc:}
\text { 17. } 5 x^{2}+22 x+8=0 & \text { 18. } 18 x^{2}+9 x+1=0 \\
(5 x+2)(x+4)=0 & (6 x+1)(3 x+1)=0 \\
5 x+2=0 \text { or } x+4=0 & 6 x+1=0 \text { or } 3 x+1=0 \\
5 x=-2 & 6 x=-1 \quad 3 x=-1 \\
x=\frac{-2}{5} \text { or } x=-4 & x=\frac{-1}{6} \text { or } x=\frac{-1}{3}
\end{array}
$$

Step 1: Write the equation in standard form: $A x^{2}+B x+C=0$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathrm{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{array}{cc:}
\text { 17. } 5 x^{2}+22 x+8=0 & \text { 18. } 18 x^{2}+9 x+1=0 \\
(5 x+2)(x+4)=0 & (6 x+1)(3 x+1)=0 \\
5 x+2=0 \text { or } x+4=0 & 6 x+1=0 \text { or } 3 x+1=0 \\
5 x=-2 & 6 x=-1 \quad 3 x=-1 \\
x=\frac{-2}{5} \text { or } x=-4 & x=\frac{-1}{6} \text { or } x=\frac{-1}{3}
\end{array}
$$

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathrm{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{array}{cc}
\text { 17. } 5 x^{2}+22 x+8=0 & \text { 18. } 18 x^{2}+9 x+1=0 \\
(5 x+2)(x+4)=0 & (6 x+1)(3 x+1)=0 \\
5 x+2=0 \text { or } x+4=0 & 6 x+1=0 \text { or } 3 x+1=0 \\
5 x=-2 & 6 x=-1 \quad 3 x=-1 \\
x=\frac{-2}{5} \text { or } x=-4 & x=\frac{-1}{6} \text { or } x=\frac{-1}{3}
\end{array}
$$

19. $3 x^{2}-26 x+16=0$

This equation is already in standard form.

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication. If $P Q=0$, then $P=0$ or $Q=0$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{array}{cc}
\text { 17. } 5 x^{2}+22 x+8=0 & \text { 18. } 18 x^{2}+9 x+1=0 \\
(5 x+2)(x+4)=0 & (6 x+1)(3 x+1)=0 \\
5 x+2=0 \text { or } x+4=0 & 6 x+1=0 \text { or } 3 x+1=0 \\
5 x=-2 & 6 x=-1 \quad 3 x=-1 \\
5 x=\frac{-2}{5} \text { or } x=-4 & x=\frac{-1}{6} \text { or } x=\frac{-1}{3}
\end{array}
$$

Step 1: Write the equation in standard form: $\mathbf{A x} \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\left.\mathbf{A x}^{2}+\mathbf{B x}+\mathrm{C}.\right)$
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{array}{ccc}
\text { 17. } 5 x^{2}+22 x+8=0 & \text { 18. } 18 x^{2}+9 x+1=0 & \text { 19. } 3 x^{2}-26 x+16=0 \\
(5 x+2)(x+4)=0 & (6 x+1)(3 x+1)=0 & (3 x-2)(x-8)=0 \\
5 x+2=0 \text { or } x+4=0 & 6 x+1=0 \text { or } 3 x+1=0 & \\
5 x=-2 & 6 x=-1 \quad 3 x=-1 \\
x=\frac{-2}{5} \text { or } x=-4 & x=\frac{-1}{6} \text { or } x=\frac{-1}{3} &
\end{array}
$$

Step 1: Write the equation in standard form: $A \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\left.\mathbf{A x}^{2}+\mathbf{B x}+\mathrm{C}.\right)$
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{array}{ccc}
\text { 17. } 5 x^{2}+22 x+8=0 & \text { 18. } 18 x^{2}+9 x+1=0 & \text { 19. } 3 x^{2}-26 x+16=0 \\
(5 x+2)(x+4)=0 & (6 x+1)(3 x+1)=0 & (3 x-2)(x-8)=0 \\
5 x+2=0 \text { or } x+4=0 & 6 x+1=0 \text { or } 3 x+1=0 & \\
5 x=-2 & 6 x=-1 \quad 3 x=-1 \\
x=-\frac{2}{5} \text { or } x=-4 & x=\frac{-1}{6} \text { or } x=\frac{-1}{3} &
\end{array}
$$

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
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\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

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## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

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\begin{array}{ccc}
\text { 17. } 5 x^{2}+22 x+8=0 & \text { 18. } 18 x^{2}+9 x+1=0 & \text { 19. } 3 x^{2}-26 x+16=0 \\
(5 x+2)(x+4)=0 & (6 x+1)(3 x+1)=0 & (3 x-2)(x-8)=0 \\
5 x+2=0 \text { or } x+4=0 & 6 x+1=0 \text { or } 3 x+1=0 & 3 x-2=0 \text { or } x-8=0 \\
5 x=-2 & 6 x=-1 \quad 3 x=-1 & \\
x=\frac{-2}{5} \text { or } x=-4 & x=\frac{-1}{6} \text { or } x=\frac{-1}{3} &
\end{array}
$$

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{array}{ccc}
\text { 17. } 5 x^{2}+22 x+8=0 & \text { 18. } 18 x^{2}+9 x+1=0 & \text { 19. } 3 x^{2}-26 x+16=0 \\
(5 x+2)(x+4)=0 & (6 x+1)(3 x+1)=0 & (3 x-2)(x-8)=0 \\
5 x+2=0 \text { or } x+4=0 & 6 x+1=0 \text { or } 3 x+1=0 & 3 x-2=0 \text { or } x-8=0 \\
5 x=-2 & 6 x=-1 \quad 3 x=-1 & \\
x=\frac{-2}{5} \text { or } x=-4 & x=\frac{-1}{6} \text { or } x=\frac{-1}{3} &
\end{array}
$$

Step 1: Write the equation in standard form: $\mathbf{A x} \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
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## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

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\begin{array}{ccc}
\text { 17. } 5 x^{2}+22 x+8=0 & \text { 18. } 18 x^{2}+9 x+1=0 & \text { 19. } 3 x^{2}-26 x+16=0 \\
(5 x+2)(x+4)=0 & (6 x+1)(3 x+1)=0 & (3 x-2)(x-8)=0 \\
5 x+2=0 \text { or } x+4=0 & 6 x+1=0 \text { or } 3 x+1=0 & 3 x-2=0 \text { or } x-8=0 \\
5 x=-2 & 6 x=-1 \quad 3 x=-1 & 3 x=2 \\
x=\frac{-2}{5} \text { or } x=-4 & x=\frac{-1}{6} \text { or } x=\frac{-1}{3} &
\end{array}
$$

Step 1: Write the equation in standard form: $\mathbf{A x} \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication. If $\mathbf{P Q}=\mathbf{0}$, then $\mathbf{P}=\mathbf{0}$ or $\mathbf{Q}=\mathbf{0}$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{array}{cc}
\text { 17. } 5 x^{2}+22 x+8=0 & \text { 18. } 18 x^{2}+9 x+1=0 \\
(5 x+2)(x+4)=0 & (6 x+1)(3 x+1)=0 \\
5 x+2=0 \text { or } x+4=0 & 6 x+1=0 \text { or } 3 x+1=0 \\
5 x=-2 & 6 x=-1 \quad 3 x=-1 \\
x=\frac{-2}{5} \text { or } x=-4 & x=\frac{-1}{6} \text { or } x=\frac{-1}{3}
\end{array}
$$

Step 1: Write the equation in standard form: $A x^{2}+B x+C=0$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathrm{C}$.)
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Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{array}{ccc}
\text { 17. } 5 x^{2}+22 x+8=0 & \text { 18. } 18 x^{2}+9 x+1=0 & \text { 19. } 3 x^{2}-26 x+16=0 \\
(5 x+2)(x+4)=0 & (6 x+1)(3 x+1)=0 & (3 x-2)(x-8)=0 \\
5 x+2=0 \text { or } x+4=0 & 6 x+1=0 \text { or } 3 x+1=0 & 3 x-2=0 \text { or } x-8=0 \\
5 x=-2 & 6 x=-1 \quad 3 x=-1 & 3 x=2 \\
x=\frac{-2}{5} \text { or } x=-4 & x=\frac{-1}{6} \text { or } x=\frac{-1}{3} & x=\frac{2}{3} \text { or } x=8
\end{array}
$$

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathrm{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.
20. $12 x^{2}-28 x+15=0 \quad$ 21. $6 x^{2}-11 x-10=0 \quad$ 22. $6 x^{2}-19 x-7=0$

Step 1: Write the equation in standard form: $\mathbf{A x} \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication. If $P Q=0$, then $P=0$ or $Q=0$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.
20. $12 x^{2}-28 x+15=0 \quad$ 21. $6 x^{2}-11 x-10=0 \quad$ 22. $6 x^{2}-19 x-7=0$

Step 1: Write the equation in standard form: $A x^{2}+B x+C=0$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication. If $P Q=0$, then $P=0$ or $Q=0$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.
20. $12 x^{2}-28 x+15=0 \quad$ 21. $6 x^{2}-11 x-10=0 \quad$ 22. $6 x^{2}-19 x-7=0$

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
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$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
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Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.
20. $12 x^{2}-28 x+15=0 \quad$ 21. $6 x^{2}-11 x-10=0 \quad$ 22. $6 x^{2}-19 x-7=0$

This equation is already in standard form.

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
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$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
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Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.
20. $12 x^{2}-28 x+15=0 \quad$ 21. $6 x^{2}-11 x-10=0 \quad$ 22. $6 x^{2}-19 x-7=0$

Step 1: Write the equation in standard form: $\mathbf{A x} \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{aligned}
& \text { 20. } 12 x^{2}-28 x+15=0 \quad \text { 21. } 6 x^{2}-11 x-10=0 \quad \text { 22. } 6 x^{2}-19 x-7=0 \\
& (6 x-5)(2 x-3)=0
\end{aligned}
$$

Step 1: Write the equation in standard form: $A \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{aligned}
& \text { 20. } 12 x^{2}-28 x+15=0 \quad \text { 21. } 6 x^{2}-11 x-10=0 \quad \text { 22. } 6 x^{2}-19 x-7=0 \\
& (6 x-5)(2 x-3)=0
\end{aligned}
$$

Step 1: Write the equation in standard form: $A x^{2}+B x+C=0$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication. If $P Q=0$, then $P=0$ or $Q=0$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{aligned}
& \text { 20. } 12 x^{2}-28 x+15=0 \text { 21. } 6 x^{2}-11 x-10=0 \quad \text { 22. } 6 x^{2}-19 x-7=0 \\
& \quad(6 x-5)(2 x-3)=0 \\
& 6 x-5=0 \text { or } 2 x-3=0
\end{aligned}
$$

Step 1: Write the equation in standard form: $A \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{aligned}
& \text { 20. } 12 x^{2}-28 x+15=0 \text { 21. } 6 x^{2}-11 x-10=0 \quad \text { 22. } 6 x^{2}-19 x-7=0 \\
& \quad(6 x-5)(2 x-3)=0 \\
& 6 x-5=0 \text { or } 2 x-3=0
\end{aligned}
$$

Step 1: Write the equation in standard form: $A \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication. If $\mathbf{P Q}=\mathbf{0}$, then $\mathbf{P}=\mathbf{0}$ or $\mathbf{Q}=\mathbf{0}$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{aligned}
& \text { 20. } 12 x^{2}-28 x+15=0 \quad \text { 21. } 6 x^{2}-11 x-10=0 \quad \text { 22. } 6 x^{2}-19 x-7=0 \\
& (6 x-5)(2 x-3)=0 \\
& 6 x-5=0 \text { or } 2 x-3=0 \\
& 6 x=5 \quad 2 x=3
\end{aligned}
$$

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathrm{C}$.)
Step 3: Apply the 'zero property of multiplication. If $\mathbf{P Q}=\mathbf{0}$, then $\mathbf{P}=\mathbf{0}$ or $\mathbf{Q}=\mathbf{0}$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{aligned}
& \text { 20. } 12 x^{2}-28 x+15=0 \quad \text { 21. } 6 x^{2}-11 x-10=0 \quad \text { 22. } 6 x^{2}-19 x-7=0 \\
& (6 x-5)(2 x-3)=0 \\
& 6 x-5=0 \text { or } 2 x-3=0 \\
& 6 x=5 \quad 2 x=3 \\
& x=\frac{5}{6} \text { or } x=\frac{3}{2}
\end{aligned}
$$

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathrm{C}$.)
Step 3: Apply the 'zero property of multiplication. If $\mathbf{P Q}=\mathbf{0}$, then $\mathbf{P}=\mathbf{0}$ or $\mathbf{Q}=\mathbf{0}$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{aligned}
& \text { 20. } 12 x^{2}-28 x+15=0 \quad \text { 21. } 6 x^{2}-11 x-10=0 \quad \text { 22. } 6 x^{2}-19 x-7=0 \\
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& 6 x-5=0 \text { or } 2 x-3=0 \\
& 6 x=5 \quad 2 x=3 \\
& x=\frac{5}{6} \text { or } x=\frac{3}{2}
\end{aligned}
$$

Step 1: Write the equation in standard form: $\mathbf{A x} \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{aligned}
& \text { 20. } 12 x^{2}-28 x+15=0 \quad \text { 21. } 6 x^{2}-11 x-10=0 \\
& (6 x-5)(2 x-3)=0 \\
& 6 x-5=0 \text { or } 2 x-3=0 \\
& 6 x=5 \quad 2 x=3 \\
& x=\frac{5}{6} \text { or } x=\frac{3}{2}
\end{aligned}
$$

Step 1: Write the equation in standard form: $A x^{2}+B x+C=0$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathrm{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{aligned}
& \text { 20. } 12 x^{2}-28 x+15=0 \quad \text { 21. } 6 x^{2}-11 x-10=0 \\
& \begin{array}{l}
(6 x-5)(2 x-3)=0 \\
6 x-5=0 \text { or } 2 x-3=0 \\
6 x=5 \quad 2 x=3 \\
x=\frac{5}{6} \text { or } x=\frac{3}{2}
\end{array}
\end{aligned}
$$

Step 1: Write the equation in standard form: $\mathbf{A x}{ }^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

| 20. $12 x^{2}-28 x+15=0$ | 21. $6 x^{2}-11 x-10=0$ | 22. $6 x^{2}-19 x-7=0$ |
| :---: | :--- | :--- |
| $(6 x-5)(2 x-3)=0$ |  |  |
| $6 x-5=0$ or $2 x-3=0$ | This equation is already |  |
| $6 x=5 \quad 2 x=3$ | in standard form. |  |
| $x=\frac{5}{6}$ or $x=\frac{3}{2}$ |  |  |

Step 1: Write the equation in standard form: $\mathbf{A x}{ }^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathrm{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

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\begin{aligned}
& \text { 20. } 12 x^{2}-28 x+15=0 \\
& (6 x-5)(2 x-3)=0 \\
& 6 x-5=0 \text { or } 2 x-3=0 \\
& 6 x=5 \quad 2 x=3 \\
& x=\frac{5}{6} \text { or } x=\frac{3}{2} \\
&
\end{aligned}
$$

Step 1: Write the equation in standard form: $\mathbf{A x} \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{aligned}
& \text { 20. } 12 x^{2}-28 x+15=0 \\
& (6 x-5)(2 x-3)=0 \\
& 6 x-5=0 \text { or } 2 x-3=0 \\
& 6 x=5 \quad 2 x-11 x-10=0 \\
& (2 x-5)(3 x+2)=0 \\
& 6 x=3 \\
& x=\frac{5}{6} \text { or } x=\frac{3}{2}
\end{aligned}
$$

Step 1: Write the equation in standard form: $\mathbf{A x} \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication. If $P Q=0$, then $P=0$ or $Q=0$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{aligned}
& \text { 20. } 12 x^{2}-28 x+15=0 \\
& (6 x-5)(2 x-3)=0 \\
& 6 x-5=0 \text { or } 2 x-3=0 \\
& 6 x=5 \quad(2 x-5)(3 x+2)=0 \\
& 6 x=3 \\
& \quad 2 x=11 x-10=0 \\
& x=\frac{5}{6} \text { or } x=\frac{3}{2}
\end{aligned}
$$

Step 1: Write the equation in standard form: $\mathbf{A x} \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathrm{C}$.)
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## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

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& \text { 20. } 12 x^{2}-28 x+15=0 \\
& (6 x-5)(2 x-3)=0 \\
& 6 x-5=0 \text { or } 2 x-3=0 \\
& 6 x-11 x-10=0 \\
& (2 x-5)(3 x+2)=0 \\
& 6 x=5 \quad 2 x=3 \\
& \quad 2 x-5=0 \text { or } 3 x+2=0 \\
& x=\frac{5}{6} \text { or } x=\frac{3}{2}
\end{aligned}
$$

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathrm{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{aligned}
& \text { 20. } 12 x^{2}-28 x+15=0 \\
& (6 x-5)(2 x-3)=0 \\
& 6 x-5=0 \text { or } 2 x-3=0 \\
& 6 x-11 x-10=0 \\
& (2 x-5)(3 x+2)=0 \\
& 6 x=5 \quad 2 x=3 \\
& \quad 2 x-5=0 \text { or } 3 x+2=0 \\
& x=\frac{5}{6} \text { or } x=\frac{3}{2}
\end{aligned}
$$

Step 1: Write the equation in standard form: $A x^{2}+B x+C=0$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathrm{C}$.)
Step 3: Apply the 'zero property of multiplication. If $\mathbf{P Q}=\mathbf{0}$, then $\mathbf{P}=\mathbf{0}$ or $\mathbf{Q}=\mathbf{0}$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{aligned}
& \text { 20. } 12 x^{2}-28 x+15=0 \quad \text { 21. } 6 x^{2}-11 x-10=0 \quad \text { 22. } 6 x^{2}-19 x-7=0 \\
& (6 x-5)(2 x-3)=0 \\
& 6 x-5=0 \text { or } 2 x-3=0 \\
& 6 x=5 \quad 2 x=3 \\
& x=\frac{5}{6} \text { or } x=\frac{3}{2} \\
& (2 x-5)(3 x+2)=0 \\
& 2 x-5=0 \text { or } 3 x+2=0 \\
& 2 \mathrm{x}=5 \quad 3 \mathrm{x}=-2
\end{aligned}
$$

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathrm{C}$.)
Step 3: Apply the 'zero property of multiplication. If $\mathbf{P Q}=\mathbf{0}$, then $\mathbf{P}=\mathbf{0}$ or $\mathbf{Q}=\mathbf{0}$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{array}{ccc}
\text { 20. } 12 x^{2}-28 x+15=0 & 21 . & 6 x^{2}-11 x-10=0 \\
(6 x-5)(2 x-3)=0 & (2 x-5)(3 x+2)=0 & \\
6 x-5=0 \text { or } 2 x-3=0 & 2 x-5=0 \text { or } 3 x+2=0 \\
6 x=5 \quad 2 x=3 & 2 x=5 \quad 3 x=-2 \\
6 x=0 \\
x=\frac{5}{6} \text { or } x=\frac{3}{2} & x=\frac{5}{2} \text { or } x=\frac{-2}{3} &
\end{array}
$$

Step 1: Write the equation in standard form: $\mathbf{A x} \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathrm{C}$.)
Step 3: Apply the 'zero property of multiplication. If $\mathbf{P Q}=\mathbf{0}$, then $\mathbf{P}=\mathbf{0}$ or $\mathbf{Q}=\mathbf{0}$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{array}{ccc}
\text { 20. } 12 x^{2}-28 x+15=0 & \text { 21. } 6 x^{2}-11 x-10=0 & 22 . \\
(6 x-5)(2 x-3)=0 & (2 x-5)(3 x+2)=0 \\
6 x-5=0 \text { or } 2 x-3=0 & 2 x-5=0 \text { or } 3 x+2=0 \\
6 x=5 \quad 2 x=3 & 2 x=5 \quad 3 x=-2 \\
x=\frac{5}{6} \text { or } x=\frac{3}{2} & x=\frac{5}{2} \text { or } x=\frac{-2}{3}
\end{array}
$$

Step 1: Write the equation in standard form: $\mathbf{A x} \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{aligned}
& \text { 20. } 12 x^{2}-28 x+15=0 \quad \text { 21. } 6 x^{2}-11 x-10=0 \\
& \text { 22. } 6 x^{2}-19 x-7=0 \\
& (6 x-5)(2 x-3)=0 \quad(2 x-5)(3 x+2)=0 \\
& 6 x-5=0 \text { or } 2 x-3=0 \quad 2 x-5=0 \text { or } 3 x+2=0 \\
& 6 x=5 \quad 2 x=3 \quad 2 x=5 \quad 3 x=-2 \\
& x=\frac{5}{6} \text { or } x=\frac{3}{2} \quad x=\frac{5}{2} \text { or } x=\frac{-2}{3} \\
& \text { 22. } 6 x^{2}-19 x-7=0
\end{aligned}
$$

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\text { 20. } 12 x^{2}-28 x+15=0 \quad \text { 21. } 6 x^{2}-11 x-10=0 \quad \text { 22. } 6 x^{2}-19 x-7=0
$$

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
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$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{array}{cc}
\text { 20. } 12 x^{2}-28 x+15=0 & \text { 21. } 6 x^{2}-11 x-10=0 \\
(6 x-5)(2 x-3)=0 & (2 x-5)(3 x+2)=0 \\
6 x-5=0 \text { or } 2 x-3=0 & 2 x-5=0 \text { or } 3 x+2=0 \\
6 x=5 \quad 2 x=3 & 2 x=5 \quad 3 x=-2 \\
x=\frac{5}{6} \text { or } x=\frac{3}{2} & x=\frac{5}{2} \text { or } x=\frac{-2}{3}
\end{array}
$$

$$
\text { 22. } 6 x^{2}-19 x-7=0
$$

This equation is already in standard form.

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathrm{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\text { 20. } 12 x^{2}-28 x+15=0 \quad \text { 21. } 6 x^{2}-11 x-10=0 \quad \text { 22. } 6 x^{2}-19 x-7=0
$$

Step 1: Write the equation in standard form: $A \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
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\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
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Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

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\begin{aligned}
& \text { 20. } 12 x^{2}-28 x+15=0 \quad \text { 21. } 6 x^{2}-11 x-10=0 \\
& (6 x-5)(2 x-3)=0 \quad(2 x-5)(3 x+2)=0 \\
& 6 x-5=0 \text { or } 2 x-3=0 \quad 2 x-5=0 \text { or } 3 x+2=0 \\
& 6 x=5 \quad 2 x=3 \quad 2 x=5 \quad 3 x=-2 \\
& x=\frac{5}{6} \text { or } x=\frac{3}{2} \quad x=\frac{5}{2} \text { or } x=\frac{-2}{3} \\
& \text { 22. } 6 x^{2}-19 x-7=0 \\
& (3 x+1)(2 x-7)=0
\end{aligned}
$$

Step 1: Write the equation in standard form: $A \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\left.\mathbf{A x}^{2}+\mathbf{B x}+\mathrm{C}.\right)$
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{aligned}
& \text { 20. } 12 x^{2}-28 x+15=0 \quad \text { 21. } 6 x^{2}-11 x-10=0 \\
& (6 x-5)(2 x-3)=0 \quad(2 x-5)(3 x+2)=0 \\
& 6 x-5=0 \text { or } 2 x-3=0 \quad 2 x-5=0 \text { or } 3 x+2=0 \\
& 6 x=5 \quad 2 x=3 \quad 2 x=5 \quad 3 x=-2 \\
& x=\frac{5}{6} \text { or } x=\frac{3}{2} \quad x=\frac{5}{2} \text { or } x=\frac{-2}{3} \\
& \text { 22. } 6 x^{2}-19 x-7=0 \\
& (3 x+1)(2 x-7)=0
\end{aligned}
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Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
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\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
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## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

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\begin{array}{cccc}
\text { 20. } 12 x^{2}-28 x+15=0 & \text { 21. } 6 x^{2}-11 x-10=0 & 22.6 x^{2}-19 x-7=0 \\
(6 x-5)(2 x-3)=0 & (2 x-5)(3 x+2)=0 & (3 x+1)(2 x-7)=0 \\
6 x-5=0 \text { or } 2 x-3=0 & 2 x-5=0 \text { or } 3 x+2=0 & 3 x+1=0 \text { or } 2 x-7=0 \\
6 x=5 \quad 2 x=3 & 2 x=5 \quad 3 x=-2 & \\
x=\frac{5}{6} \text { or } x=\frac{3}{2} & x=\frac{5}{2} \text { or } x=\frac{-2}{3} &
\end{array}
$$

Step 1: Write the equation in standard form: $A x^{2}+B x+C=0$
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\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
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Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

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\text { 20. } 12 x^{2}-28 x+15=0 & \text { 21. } 6 x^{2}-11 x-10=0 & 22.6 x^{2}-19 x-7=0 \\
(6 x-5)(2 x-3)=0 & (2 x-5)(3 x+2)=0 & (3 x+1)(2 x-7)=0 \\
6 x-5=0 \text { or } 2 x-3=0 & 2 x-5=0 \text { or } 3 x+2=0 & 3 x+1=0 \text { or } 2 x-7=0 \\
6 x=5 \quad 2 x=3 & 2 x=5 \quad 3 x=-2 & \\
x=\frac{5}{6} \text { or } x=\frac{3}{2} & x=\frac{5}{2} \text { or } x=\frac{-2}{3} &
\end{array}
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Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
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\text { 20. } 12 x^{2}-28 x+15=0 & \text { 21. } 6 x^{2}-11 x-10=0 & \text { 22. } 6 x^{2}-19 x-7=0 \\
(6 x-5)(2 x-3)=0 & (2 x-5)(3 x+2)=0 & (3 x+1)(2 x-7)=0 \\
6 x-5=0 \text { or } 2 x-3=0 & 2 x-5=0 \text { or } 3 x+2=0 & 3 x+1=0 \text { or } 2 x-7=0 \\
6 x=5 \quad 2 x=3 & 2 x=5 \quad 3 x=-2 & 3 x=-1 \quad 2 x=7 \\
\begin{array}{cc} 
\\
6=\frac{5}{6} \text { or } x=\frac{3}{2} & x=\frac{5}{2} \text { or } x=\frac{-2}{3}
\end{array} &
\end{array}
$$

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
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(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
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(6 x-5)(2 x-3)=0 & (2 x-5)(3 x+2)=0 & (3 x+1)(2 x-7)=0 \\
6 x-5=0 \text { or } 2 x-3=0 & 2 x-5=0 \text { or } 3 x+2=0 & 3 x+1=0 \text { or } 2 x-7=0 \\
6 x=5 \quad 2 x=3 & 2 x=5 \quad 3 x=-2 & 3 x=-1 \quad 2 x=7 \\
\begin{array}{cc}
6 & 2 x \\
x & \text { or } x=\frac{3}{2}
\end{array} \quad x=\frac{5}{2} \text { or } x=\frac{-2}{3} & x=\frac{-1}{3} \text { or } x=\frac{7}{2}
\end{array}
$$

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathrm{C}$.)
Step 3: Apply the 'zero property of multiplication.
If $\mathbf{P Q}=\mathbf{0}$, then $\mathbf{P}=\mathbf{0}$ or $\mathbf{Q}=\mathbf{0}$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{array}{ccc}
\text { 20. } 12 x^{2}-28 x+15=0 & \text { 21. } 6 x^{2}-11 x-10=0 & \text { 22. } 6 x^{2}-19 x-7=0 \\
(6 x-5)(2 x-3)=0 & (2 x-5)(3 x+2)=0 & (3 x+1)(2 x-7)=0 \\
6 x-5=0 \text { or } 2 x-3=0 & 2 x-5=0 \text { or } 3 x+2=0 & 3 x+1=0 \text { or } 2 x-7=0 \\
6 x=5 \quad 2 x=3 & 2 x=5 \quad 3 x=-2 & 3 x=-1 \quad 2 x=7 \\
x=\frac{5}{6} \text { or } x=\frac{3}{2} & x=\frac{5}{2} \text { or } x=\frac{-2}{3} & x=\frac{-1}{3} \text { or } x=\frac{7}{2}
\end{array}
$$

Step 1: Write the equation in standard form: $\mathbf{A x} \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.
23. $5 x^{2}+13 x-6=0 \quad$ 24. $15 x^{2}+26 x-21=0 \quad$ 25. $40 x^{2}+x-6=0$

Step 1: Write the equation in standard form: $\mathbf{A x} \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication. If $\mathbf{P Q}=\mathbf{0}$, then $\mathbf{P}=0$ or $\mathbf{Q}=\mathbf{0}$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.
23. $5 x^{2}+13 x-6=0 \quad$ 24. $15 x^{2}+26 x-21=0 \quad$ 25. $40 x^{2}+x-6=0$

Step 1: Write the equation in standard form: $A x^{2}+B x+C=0$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication. If $P Q=0$, then $P=0$ or $Q=0$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.
23. $5 x^{2}+13 x-6=0 \quad$ 24. $15 x^{2}+26 x-21=0 \quad$ 25. $40 x^{2}+x-6=0$

Step 1: Write the equation in standard form: $A \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.
23. $5 x^{2}+13 x-6=0 \quad$ 24. $15 x^{2}+26 x-21=0 \quad$ 25. $40 x^{2}+x-6=0$

This equation is already in standard form.

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathrm{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.
23. $5 x^{2}+13 x-6=0 \quad$ 24. $15 x^{2}+26 x-21=0 \quad$ 25. $40 x^{2}+x-6=0$

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.
23. $5 x^{2}+13 x-6=0 \quad$ 24. $15 x^{2}+26 x-21=0 \quad$ 25. $40 x^{2}+x-6=0$
$(5 x-2)(x+3)=0$

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathrm{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.
23. $5 x^{2}+13 x-6=0 \quad$ 24. $15 x^{2}+26 x-21=0 \quad$ 25. $40 x^{2}+x-6=0$
$(5 x-2)(x+3)=0$

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{aligned}
& \text { 23. } 5 x^{2}+13 x-6=0 \\
& (5 x-2)(x+3)=0 \\
& 5 x-2=0 \text { or } x+3=0
\end{aligned}
$$

Step 1: Write the equation in standard form: $A x^{2}+B x+C=0$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication. If $P Q=0$, then $P=0$ or $Q=0$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.
23. $5 x^{2}+13 x-6=0$
24. $15 x^{2}+26 x-21=0$
25. $40 x^{2}+x-6=0$
$(5 x-2)(x+3)=0$
$5 x-2=0$ or $x+3=0$

Step 1: Write the equation in standard form: $A \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication. If $\mathbf{P Q}=\mathbf{0}$, then $\mathbf{P}=\mathbf{0}$ or $\mathbf{Q}=\mathbf{0}$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{aligned}
& \text { 23. } 5 x^{2}+13 x-6=0 \\
& (5 x-2)(x+3)=0 \\
& 5 x-2=0 \text { or } x+3=0 \\
& 5 x=2
\end{aligned}
$$

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication. If $\mathbf{P Q}=\mathbf{0}$, then $\mathbf{P}=\mathbf{0}$ or $\mathbf{Q}=\mathbf{0}$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{aligned}
& \text { 23. } 5 x^{2}+13 x-6=0 \\
& (5 x-2)(x+3)=0 \\
& 5 x-2=0 \text { or } x+3=0 \\
& 5 x=2 \\
& x=\frac{2}{5} \text { or } x=-3
\end{aligned}
$$

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication. If $\mathbf{P Q}=\mathbf{0}$, then $\mathbf{P}=\mathbf{0}$ or $\mathbf{Q}=\mathbf{0}$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{aligned}
& \text { 23. } 5 x^{2}+13 x-6=0 \quad \text { 24. } 15 x^{2}+26 x-21=0 \\
& \begin{array}{l}
(5 x-2)(x+3)=0 \\
5 x-2=0
\end{array} \\
& 5 x=2 \\
& x=\frac{2}{5} \text { or } x+3=0 \\
& x=-3
\end{aligned}
$$

Step 1: Write the equation in standard form: $\mathbf{A x} \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.


Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

| 23. $5 x^{2}+13 x-6=0$ | 24. $15 x^{2}+26 x-21=0$ | 25. $40 x^{2}+x-6=0$ |
| :--- | :--- | :--- |
| $(5 x-2)(x+3)=0$ |  |  |
| $5 x-2=0$ or $x+3=0$ |  |  |
| $5 x=2$ |  |  |
| $x=\frac{2}{5}$ or $x=-3$ |  |  |
|  |  |  |

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

| 23. $5 x^{2}+13 x-6=0$ | 24. $15 x^{2}+26 x-21=0$ | 25. $40 x^{2}+x-6=0$ |
| :---: | :--- | :--- |
| $(5 x-2)(x+3)=0$ |  |  |
| $5 x-2=0$ or $x+3=0$ | This equation is already |  |
| in standard form. |  |  |
| $5 x=2$ |  |  |
| $x=\frac{2}{5}$ or $x=-3$ |  |  |

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathrm{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

| 23. $5 x^{2}+13 x-6=0$ | 24. $15 x^{2}+26 x-21=0$ | 25. $40 x^{2}+x-6=0$ |
| :--- | :--- | :--- |
| $(5 x-2)(x+3)=0$ |  |  |
| $5 x-2=0$ or $x+3=0$ |  |  |
| $5 x=2$ |  |  |
| $x=\frac{2}{5}$ or $x=-3$ |  |  |
|  |  |  |

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

| 23. $5 x^{2}+13 x-6=0$ | 24. $15 x^{2}+26 x-21=0$ | 25. $40 x^{2}+x-6=0$ |
| :---: | :---: | :---: |
| $(5 x-2)(x+3)=0$ | $(5 x-3)(3 x+7)=0$ |  |
| $5 x-2=0$ or $x+3=0$ |  |  |
| $5 x=2$ |  |  |
| $x=\frac{2}{5}$ or $x=-3$ |  |  |
|  |  |  |
|  |  |  |

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

| 23. $5 x^{2}+13 x-6=0$ | 24. $15 x^{2}+26 x-21=0$ | 25. $40 x^{2}+x-6=0$ |
| :---: | :---: | :---: |
| $(5 x-2)(x+3)=0$ | $(5 x-3)(3 x+7)=0$ |  |
| $5 x-2=0$ or $x+3=0$ |  |  |
| $5 x=2$ |  |  |
| $x=\frac{2}{5}$ or $x=-3$ |  |  |
|  |  |  |
|  |  |  |

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathrm{C}$.)
Step 3: Apply the 'zero property of multiplication. If $P Q=0$, then $P=0$ or $Q=0$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.
23. $5 x^{2}+13 x-6=0$

$$
\text { 24. } 15 x^{2}+26 x-21=0 \quad \text { 25. } 40 x^{2}+x-6=0
$$

$$
(5 x-2)(x+3)=0
$$

$$
5 x-2=0 \text { or } x+3=0
$$

$$
\begin{aligned}
& \text { 24. } 15 x^{2}+26 x-21=0 \\
& (5 x-3)(3 x+7)=0 \\
& 5 x-3=0 \text { or } 3 x+7=0
\end{aligned}
$$

$$
5 x=2
$$

$$
x=\frac{2}{5} \text { or } x=-3
$$

Step 1: Write the equation in standard form: $A x^{2}+B x+C=0$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathrm{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{array}{c|c|c}
\text { 23. } 5 x^{2}+13 x-6=0 & \text { 24. } 15 x^{2}+26 x-21=0 & \text { 25. } 40 x^{2}+x-6=0 \\
(5 x-2)(x+3)=0 & (5 x-3)(3 x+7)=0 \\
5 x-2=0 \text { or } x+3=0 & 5 x-3=0 \text { or } 3 x+7=0 \\
5 x=2 & \\
\hline x=\frac{2}{5} \text { or } x=-3 & & \\
\hline
\end{array}
$$

Step 1: Write the equation in standard form: $A x^{2}+B x+C=0$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathrm{C}$.)
Step 3: Apply the 'zero property of multiplication. If $\mathbf{P Q}=\mathbf{0}$, then $\mathbf{P}=\mathbf{0}$ or $\mathbf{Q}=\mathbf{0}$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.
23. $5 x^{2}+13 x-6=0$

$$
(5 x-2)(x+3)=0
$$

$$
5 x-2=0 \text { or } x+3=0
$$

$$
5 x=2
$$

$$
\begin{aligned}
& \text { 24. } 15 x^{2}+26 x-21=0 \\
& \begin{array}{l}
(5 x-3)(3 x+7)=0 \\
5 x-3=0
\end{array} \text { or } 3 x+7=0 \\
& 5 x=3 \quad 3 x=-7
\end{aligned}
$$

$$
x=\frac{2}{5} \text { or } x=-3
$$

Step 1: Write the equation in standard form: $A x^{2}+B x+C=0$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication. If $\mathbf{P Q}=\mathbf{0}$, then $\mathbf{P}=\mathbf{0}$ or $\mathbf{Q}=\mathbf{0}$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.
23. $5 x^{2}+13 x-6=0$

$$
\text { 24. } 15 x^{2}+26 x-21=0
$$

$$
\text { 25. } 40 x^{2}+x-6=0
$$

$$
(5 x-2)(x+3)=0
$$

$$
5 x-2=0 \text { or } x+3=0
$$

$$
5 x=2
$$

$$
x=\frac{2}{5} \text { or } x=-3
$$

Step 1: Write the equation in standard form: $A x^{2}+B x+C=0$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathrm{C}$.)
Step 3: Apply the 'zero property of multiplication. If $\mathbf{P Q}=\mathbf{0}$, then $\mathbf{P}=\mathbf{0}$ or $\mathbf{Q}=\mathbf{0}$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{array}{ccc}
\text { 23. } 5 x^{2}+13 x-6=0 & \text { 24. } 15 x^{2}+26 x-21=0 & \text { 25. } 40 x^{2}+x-6=0 \\
(5 x-2)(x+3)=0 & (5 x-3)(3 x+7)=0 \\
5 x-2=0 \text { or } x+3=0 & 5 x-3=0 \text { or } 3 x+7=0 \\
5 x=2 & 5 x=3 \quad 3 x=-7 \\
x=\frac{2}{5} \text { or } x=-3 & x=\frac{3}{5} \text { or } x=\frac{-7}{3}
\end{array}
$$

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{array}{cc|c}
\text { 23. } 5 x^{2}+13 x-6=0 & \text { 24. } 15 x^{2}+26 x-21=0 & \text { 25. } 40 x^{2}+x-6=0 \\
(5 x-2)(x+3)=0 & (5 x-3)(3 x+7)=0 & \\
5 x-2=0 \text { or } x+3=0 & 5 x-3=0 \text { or } 3 x+7=0 \\
5 x=2 & 5 x=3 \quad 3 x=-7 \\
& \\
x=\frac{2}{5} \text { or } x=-3 & x=\frac{3}{5} \text { or } x=\frac{-7}{3} &
\end{array}
$$

Step 1: Write the equation in standard form: $A \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{array}{cc|c}
\text { 23. } 5 x^{2}+13 x-6=0 & \text { 24. } 15 x^{2}+26 x-21=0 & \text { 25. } 40 x^{2}+x-6=0 \\
(5 x-2)(x+3)=0 & (5 x-3)(3 x+7)=0 & \\
5 x-2=0 \text { or } x+3=0 & 5 x-3=0 \text { or } 3 x+7=0 \\
5 x=2 & 5 x=3 \quad 3 x=-7 \\
x=\frac{2}{5} \text { or } x=-3 & x=\frac{3}{5} \text { or } x=\frac{-7}{3}
\end{array}
$$

Step 1: Write the equation in standard form: $A x^{2}+B x+C=0$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{array}{ccl}
\text { 23. } 5 x^{2}+13 x-6=0 & \text { 24. } 15 x^{2}+26 x-21=0 & \text { 25. } 40 x^{2}+x-6=0 \\
(5 x-2)(x+3)=0 & (5 x-3)(3 x+7)=0 & \\
5 x-2=0 \text { or } x+3=0 & 5 x-3=0 \text { or } 3 x+7=0 & \text { This equation is already } \\
5 x=2 & 5 x=3 \quad 3 x=-7 & \text { in standard form. } \\
\begin{array}{cc}
x=\frac{2}{5} \text { or } x=-3 & x=\frac{3}{5} \text { or } x=\frac{-7}{3}
\end{array} &
\end{array}
$$

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathrm{C}$.)
Step 3: Apply the 'zero property of multiplication. If $P Q=0$, then $P=0$ or $Q=0$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{array}{cc|c}
\text { 23. } 5 x^{2}+13 x-6=0 & \text { 24. } 15 x^{2}+26 x-21=0 & \text { 25. } 40 x^{2}+x-6=0 \\
(5 x-2)(x+3)=0 & (5 x-3)(3 x+7)=0 & \\
5 x-2=0 \text { or } x+3=0 & 5 x-3=0 \text { or } 3 x+7=0 \\
5 x=2 & 5 x=3 \quad 3 x=-7 \\
x=\frac{2}{5} \text { or } x=-3 & x=\frac{3}{5} \text { or } x=\frac{-7}{3} &
\end{array}
$$

Step 1: Write the equation in standard form: $A \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathrm{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{array}{cc|c}
\text { 23. } 5 x^{2}+13 x-6=0 & \text { 24. } 15 x^{2}+26 x-21=0 & \text { 25. } 40 x^{2}+x-6=0 \\
(5 x-2)(x+3)=0 & (5 x-3)(3 x+7)=0 & (8 x-3)(5 x+2)=0 \\
5 x-2=0 \text { or } x+3=0 & 5 x-3=0 \text { or } 3 x+7=0 & \\
5 x=2 & 5 x=3 \quad 3 x=-7 & \\
x=\frac{2}{5} \text { or } x=-3 & x=\frac{3}{5} \text { or } x=\frac{-7}{3} &
\end{array}
$$

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{array}{cc|c}
\text { 23. } 5 x^{2}+13 x-6=0 & \text { 24. } 15 x^{2}+26 x-21=0 & \text { 25. } 40 x^{2}+x-6=0 \\
(5 x-2)(x+3)=0 & (5 x-3)(3 x+7)=0 & (8 x-3)(5 x+2)=0 \\
5 x-2=0 \text { or } x+3=0 & 5 x-3=0 \text { or } 3 x+7=0 & \\
5 x=2 & 5 x=3 \quad 3 x=-7 & \\
x=\frac{2}{5} \text { or } x=-3 & x=\frac{3}{5} \text { or } x=\frac{-7}{3} &
\end{array}
$$

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{array}{cc|c}
\text { 23. } 5 x^{2}+13 x-6=0 & \text { 24. } 15 x^{2}+26 x-21=0 & \text { 25. } 40 x^{2}+x-6=0 \\
(5 x-2)(x+3)=0 & (5 x-3)(3 x+7)=0 & (8 x-3)(5 x+2)=0 \\
5 x-2=0 \text { or } x+3=0 & 5 x-3=0 \text { or } 3 x+7=0 & 8 x-3=0 \text { or } 5 x+2= \\
5 x=2 & 5 x=3 \quad 3 x=-7 & \\
x=\frac{2}{5} \text { or } x=-3 & x=\frac{3}{5} \text { or } x=\frac{-7}{3} &
\end{array}
$$

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{array}{ccc}
\text { 23. } 5 x^{2}+13 x-6=0 & \text { 24. } 15 x^{2}+26 x-21=0 & 25.40 x^{2}+x-6=0 \\
(5 x-2)(x+3)=0 & (5 x-3)(3 x+7)=0 & (8 x-3)(5 x+2)=0 \\
5 x-2=0 \text { or } x+3=0 & 5 x-3=0 \text { or } 3 x+7=0 & 8 x-3=0 \text { or } 5 x+2=0 \\
5 x=2 & 5 x=3 \quad 3 x=-7 & \\
x=\frac{2}{5} \text { or } x=-3 & x=\frac{3}{5} \text { or } x=\frac{-7}{3} &
\end{array}
$$

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication. If $\mathbf{P Q}=\mathbf{0}$, then $\mathbf{P}=\mathbf{0}$ or $\mathbf{Q}=\mathbf{0}$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{array}{ccc}
\text { 23. } 5 x^{2}+13 x-6=0 & \text { 24. } 15 x^{2}+26 x-21=0 & 25.40 x^{2}+x-6=0 \\
(5 x-2)(x+3)=0 & (5 x-3)(3 x+7)=0 & (8 x-3)(5 x+2)=0 \\
5 x-2=0 \text { or } x+3=0 & 5 x-3=0 \text { or } 3 x+7=0 & 8 x-3=0 \text { or } 5 x+2=0 \\
5 x=2 & 5 x=3 \quad 3 x=-7 & 8 x=3 \quad 5 x=-2 \\
x=\frac{2}{5} \text { or } x=-3 & x=\frac{3}{5} \text { or } x=\frac{-7}{3} &
\end{array}
$$

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
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Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{array}{ccc}
\text { 23. } 5 x^{2}+13 x-6=0 & \text { 24. } 15 x^{2}+26 x-21=0 & 25.40 x^{2}+x-6=0 \\
(5 x-2)(x+3)=0 & (5 x-3)(3 x+7)=0 & (8 x-3)(5 x+2)=0 \\
5 x-2=0 \text { or } x+3=0 & 5 x-3=0 \text { or } 3 x+7=0 & 8 x-3=0 \text { or } 5 x+2=0 \\
5 x=2 & 5 x=3 \quad 3 x=-7 & 8 x=3 \quad 5 x=-2 \\
x=\frac{2}{5} \text { or } x=-3 & x=\frac{3}{5} \text { or } x=\frac{-7}{3} & x=\frac{3}{8} \text { or } x=\frac{-2}{5}
\end{array}
$$

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
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Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{array}{ccc}
\text { 23. } 5 x^{2}+13 x-6=0 & \text { 24. } 15 x^{2}+26 x-21=0 & 25.40 x^{2}+x-6=0 \\
(5 x-2)(x+3)=0 & (5 x-3)(3 x+7)=0 & (8 x-3)(5 x+2)=0 \\
5 x-2=0 \text { or } x+3=0 & 5 x-3=0 \text { or } 3 x+7=0 & 8 x-3=0 \text { or } 5 x+2=0 \\
5 x=2 & 5 x=3 \quad 3 x=-7 & 8 x=3 \\
& 5 x=-2 \\
x=\frac{2}{5} \text { or } x=-3 & x=\frac{3}{5} \text { or } x=\frac{-7}{3} & x=\frac{3}{8} \text { or } x=\frac{-2}{5}
\end{array}
$$

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathrm{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\text { 26. } 3 x^{2}+5 x=4 x+2 \quad \text { 27. } x^{2}=5 x+6
$$

Step 1: Write the equation in standard form: $\mathbf{A x} \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication. If $P Q=0$, then $P=0$ or $Q=0$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\text { 26. } 3 x^{2}+5 x=4 x+2
$$

$$
\text { 27. } x^{2}=5 x+6
$$

Step 1: Write the equation in standard form: $A \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication. If $P Q=0$, then $P=0$ or $Q=0$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\text { 26. } 3 x^{2}+5 x=4 x+2
$$

$$
\text { 27. } x^{2}=5 x+6
$$

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
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Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\text { 26. } 3 x^{2}+5 x=4 x+2
$$

$$
\text { 27. } x^{2}=5 x+6
$$

Step 1: Write the equation in standard form: $A \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.
26. $3 x^{2}+5 x=4 x+2$
$3 x^{2}+x-2=0$
27. $x^{2}=5 x+6$

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\text { 26. } \begin{gathered}
3 x^{2}+5 x=4 x+2 \\
3 x^{2}+x-2=0 \\
(3 x-2)(x+1)=0
\end{gathered}
$$

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\text { 26. } \begin{gathered}
3 x^{2}+5 x=4 x+2 \\
3 x^{2}+x-2=0 \\
(3 x-2)(x+1)=0
\end{gathered}
$$

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication. If $\mathbf{P Q}=\mathbf{0}$, then $\mathbf{P}=\mathbf{0}$ or $\mathbf{Q}=\mathbf{0}$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{gathered}
\text { 26. } 3 x^{2}+5 x=4 x+2 \\
3 x^{2}+x-2=0 \\
(3 x-2)(x+1)=0 \\
3 x-2=0 \text { or } x+1=0
\end{gathered}
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Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
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(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
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Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{gathered}
\text { 26. } 3 x^{2}+5 x=4 x+2 \\
3 x^{2}+x-2=0 \\
(3 x-2)(x+1)=0 \\
3 x-2=0 \text { or } x+1=0
\end{gathered}
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Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
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Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{gathered}
\text { 26. } 3 x^{2}+5 x=4 x+2 \\
3 x^{2}+x-2=0 \\
(3 x-2)(x+1)=0 \\
3 x-2=0 \text { or } x+1=0 \\
3 x=2
\end{gathered}
$$

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathrm{C}$.)
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## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

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\begin{gathered}
\text { 26. } 3 x^{2}+5 x=4 x+2 \\
3 x^{2}+x-2=0 \\
(3 x-2)(x+1)=0 \\
3 x-2=0 \text { or } x+1=0 \\
3 x=2 \\
x=\frac{2}{3} \text { or } x=-1
\end{gathered}
$$

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathrm{C}$.)
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## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

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\begin{gathered}
\text { 26. } 3 x^{2}+5 x=4 x+2 \\
3 x^{2}+x-2=0 \\
(3 x-2)(x+1)=0 \\
3 x-2=0 \text { or } x+1=0 \\
3 x=2 \\
x=\frac{2}{3} \text { or } x=-1
\end{gathered}
$$

Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
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Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

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\begin{gathered}
\text { 26. } 3 x^{2}+5 x=4 x+2 \\
3 x^{2}+x-2=0 \\
(3 x-2)(x+1)=0 \\
3 x-2=0 \text { or } x+1=0 \\
3 x=2 \\
x=\frac{2}{3} \text { or } x=-1
\end{gathered}
$$

Step 1: Write the equation in standard form: $A \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathrm{C}$.)
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## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{gathered}
\text { 26. } 3 x^{2}+5 x=4 x+2 \\
3 x^{2}+x-2=0 \\
(3 x-2)(x+1)=0 \\
3 x-2=0 \text { or } x+1=0 \\
3 x=2 \\
x=\frac{2}{3} \text { or } x=-1
\end{gathered}
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Step 1: Write the equation in standard form: $A x^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
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$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{gathered}
\text { 26. } 3 x^{2}+5 x=4 x+2 \\
3 x^{2}+x-2=0 \\
(3 x-2)(x+1)=0 \\
3 x-2=0 \text { or } x+1=0 \\
3 x=2 \\
x=\frac{2}{3} \text { or } x=-1
\end{gathered}
$$

$$
\begin{aligned}
& \text { 27. } x^{2}=5 x+6 \\
& x^{2}-5 x-6=0
\end{aligned}
$$

Step 1: Write the equation in standard form: $\mathbf{A x} \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication. If $P Q=0$, then $P=0$ or $Q=0$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{gathered}
\text { 26. } 3 x^{2}+5 x=4 x+2 \\
3 x^{2}+x-2=0 \\
(3 x-2)(x+1)=0 \\
3 x-2=0 \text { or } x+1=0 \\
3 x=2 \\
x=\frac{2}{3} \text { or } x=-1
\end{gathered}
$$

$$
\begin{aligned}
& \text { 27. } x^{2}=5 x+6 \\
& x^{2}-5 x-6=0
\end{aligned}
$$



Step 1: Write the equation in standard form: $A \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
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\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
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## Algebra II Class Worksheet \#2 Unit 6

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\begin{gathered}
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(3 x-2)(x+1)=0 \\
3 x-2=0 \text { or } x+1=0 \\
3 x=2 \\
x=\frac{2}{3} \text { or } x=-1
\end{gathered}
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Step 1: Write the equation in standard form: $\mathbf{A x} \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
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3 x=2 \\
x=\frac{2}{3} \text { or } x=-1
\end{gathered}
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\text { 26. } 3 x^{2}+5 x=4 x+2 \\
3 x^{2}+x-2=0 \\
(3 x-2)(x+1)=0 \\
3 x-2=0 \text { or } x+1=0 \\
3 x=2 \\
x=\frac{2}{3} \text { or } x=-1
\end{gathered}
$$

$$
\begin{gathered}
\text { 27. } x^{2}=5 x+6 \\
x^{2}-5 x-6=0 \\
(x-6)(x+1)=0 \\
x-6=0 \text { or } x+1=0
\end{gathered}
$$

Step 1: Write the equation in standard form: $\mathbf{A x} \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
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Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{gathered}
\text { 26. } 3 x^{2}+5 x=4 x+2 \\
3 x^{2}+x-2=0 \\
(3 x-2)(x+1)=0 \\
3 x-2=0 \text { or } x+1=0 \\
3 x=2 \\
x=\frac{2}{3} \text { or } x=-1
\end{gathered}
$$

$$
\begin{gathered}
\text { 27. } x^{2}=5 x+6 \\
x^{2}-5 x-6=0 \\
(x-6)(x+1)=0 \\
x-6=0 \text { or } x+1=0
\end{gathered}
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Step 1: Write the equation in standard form: $\mathbf{A x} \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
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(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathrm{C}$.)
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Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{gathered}
\text { 26. } 3 x^{2}+5 x=4 x+2 \\
3 x^{2}+x-2=0 \\
(3 x-2)(x+1)=0 \\
3 x-2=0 \text { or } x+1=0 \\
3 x=2 \\
x=\frac{2}{3} \text { or } x=-1
\end{gathered}
$$

$$
\begin{gathered}
\text { 27. } x^{2}=5 x+6 \\
x^{2}-5 x-6=0 \\
(x-6)(x+1)=0 \\
x-6=0 \text { or } x+1=0 \\
x=6 \text { or } x=-1
\end{gathered}
$$

Step 1: Write the equation in standard form: $\mathbf{A x} \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathrm{C}$.)
Step 3: Apply the 'zero property of multiplication. If $\mathbf{P Q}=\mathbf{0}$, then $\mathbf{P}=\mathbf{0}$ or $\mathbf{Q}=\mathbf{0}$.
Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\begin{array}{cc}
\text { 26. } 3 x^{2}+5 x=4 x+2 & 27 . x^{2}=5 x+6 \\
3 x^{2}+x-2=0 & x^{2}-5 x-6=0 \\
(3 x-2)(x+1)=0 & (x-6)(x+1)=0 \\
3 x-2=0 \text { or } x+1=0 & x-6=0 \text { or } x+1=0 \\
3 x=2 & x=6 \text { or } x=-1 \\
x=\frac{2}{3} \text { or } x=-1 &
\end{array}
$$

Step 1: Write the equation in standard form: $\mathbf{A x} \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

$$
\text { 28. } x^{2}+(x+1)^{2}=(x+2)^{2} \quad \text { 29. } x^{2}+5(x-3)=7 x-15
$$

Step 1: Write the equation in standard form: $\mathbf{A x} \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
Step 2: Write the equation in factored form.
(Factor the polynomial $\mathbf{A x}^{2}+\mathbf{B x}+\mathbf{C}$.)
Step 3: Apply the 'zero property of multiplication.

$$
\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
$$

Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.
28. $x^{2}+(x+1)^{2}=(x+2)^{2}$
29. $x^{2}+5(x-3)=7 x-15$

Step 1: Write the equation in standard form: $A x^{2}+B x+C=0$
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\text { If } P Q=0 \text {, then } P=0 \text { or } Q=0
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Step 4: Solve each equation.

## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.
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## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.
30. $(3 x-1)(3 x+4)=9 x$
31. $3 x^{2}-5=5 x-7$

Step 1: Write the equation in standard form: $\mathbf{A x} \mathbf{x}^{2}+\mathbf{B x}+\mathbf{C}=\mathbf{0}$
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30. $(3 x-1)(3 x+4)=9 x$

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9 x^{2}+9 x-4=9 x
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Step 1: Write the equation in standard form: $A x^{2}+B x+C=0$
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## Algebra II Class Worksheet \#2 Unit 6

Use the factoring method to solve each of the following equations.

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\begin{aligned}
& \text { 31. } 3 x^{2}-5=5 x-7 \\
& 3 x^{2}-5 x+2=0
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3 x=2 \\
x=\frac{2}{3} \text { or } x=1
\end{gathered}
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Algebra II Class Worksheet \#2 Unit 6
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3 x+2=0 \text { or } 3 x-2=0 & 3 x=2 \\
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\text { GOOCHUCK On the nomewnork. }
\end{array}
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