Algebra I Lesson #3 Unit 11 Class Worksheet #3 For Worksheets #5 & #6

Consider the following multiplication problems.

(3x+2)(3x-2) =

$$(8x-5)(8x+5) =$$

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 $(3x+2)(3x-2) = 9x^2$

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$$(3x+2)(3x-2) = 9x^2 -$$

$$(8x-5)(8x+5) =$$

$$(3x+2)(3x-2) = 9x^2 - 6x$$

$$(8x-5)(8x+5) =$$

$$(3x+2)(3x-2) = 9x^2 - 6x$$

$$(8x-5)(8x+5) =$$

$$(3x+2)(3x-2) = 9x^2 - 6x +$$

$$(8x-5)(8x+5) =$$

$$(3x+2)(3x-2) = 9x^2 - 6x + 6x$$

$$(8x-5)(8x+5) =$$

$$(3x + 2)(3x - 2) = 9x^2 - 6x + 6x$$

$$(8x-5)(8x+5) =$$

$$(3x+2)(3x-2) = 9x^2 - 6x + 6x - 4x^2$$

$$(8x-5)(8x+5) =$$

$$(3x + 2)(3x - 2) = 9x^2 - 6x + 6x - 4$$

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$$(3x+2)(3x-2) = 9x^2 - 6x + 6x - 4 = 9x^2 - 4$$

$$(8x-5)(8x+5) = 64x^2 + 40x$$

$$(3x + 2)(3x - 2) = 9x^2 - 6x + 6x - 4 = 9x^2 - 4$$

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These problems represent a special case in which the product of two binomials is a binomial.

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These problems represent a special case in which the product of two binomials is a binomial. What causes this is that the 'outer product' and the 'inner product' add up to zero.

Consider the following multiplication problems.

$$(3x + 2)(3x - 2) = 9x^2 - 6x + 6x - 4 = 9x^2 - 4$$

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It is important to recognize multiplication problems that are similar to these examples.

$$(3x + 2)(3x - 2) = 9x2 - 4$$
$$(8x - 5)(8x + 5) = 64x2 - 25$$
$$(A + B)(A - B) = A2 - B2$$

```
(3x + 2)(3x - 2) = 9x<sup>2</sup> - 4(8x - 5)(8x + 5) = 64x<sup>2</sup> - 25(A + B)(A - B) = A<sup>2</sup> - B<sup>2</sup>
```

$$(3x + 2)(3x - 2) = 9x^2 - 4 \longrightarrow 9x^2 - 4 =$$

 $(8x - 5)(8x + 5) = 64x^2 - 25$
 $(A + B)(A - B) = A^2 - B^2$

$$(3x + 2)(3x - 2) = 9x^2 - 4$$
 \longrightarrow $9x^2 - 4 = (3x + 2)(3x - 2)$
 $(8x - 5)(8x + 5) = 64x^2 - 25$
 $(A + B)(A - B) = A^2 - B^2$

$$(3x + 2)(3x - 2) = 9x^2 - 4 \longrightarrow 9x^2 - 4 = (3x + 2)(3x - 2)$$

 $(8x - 5)(8x + 5) = 64x^2 - 25 \longrightarrow 64x^2 - 25 =$
 $(A + B)(A - B) = A^2 - B^2$

$$(3x + 2)(3x - 2) = 9x^2 - 4 \longrightarrow 9x^2 - 4 = (3x + 2)(3x - 2)$$

 $(8x - 5)(8x + 5) = 64x^2 - 25 \longrightarrow 64x^2 - 25 = (8x - 5)(8x + 5)$
 $(A + B)(A - B) = A^2 - B^2$

It is important to recognize multiplication problems that are similar to these examples. These equations can be written to demonstrate an important factoring pattern known as the <u>difference of two squares</u>.

$$(3x + 2)(3x - 2) = 9x^{2} - 4 \qquad \longrightarrow \qquad 9x^{2} - 4 = (3x + 2)(3x - 2)$$
$$(8x - 5)(8x + 5) = 64x^{2} - 25 \qquad \longrightarrow \qquad 64x^{2} - 25 = (8x - 5)(8x + 5)$$
$$(A + B)(A - B) = A^{2} - B^{2} \qquad \longrightarrow \qquad A^{2} - B^{2} =$$

It is important to recognize multiplication problems that are similar to these examples. These equations can be written to demonstrate an important factoring pattern known as the <u>difference of two squares</u>.

$$(3x + 2)(3x - 2) = 9x^{2} - 4 \implies 9x^{2} - 4 = (3x + 2)(3x - 2)$$
$$(8x - 5)(8x + 5) = 64x^{2} - 25 \implies 64x^{2} - 25 = (8x - 5)(8x + 5)$$
$$(A + B)(A - B) = A^{2} - B^{2} \implies A^{2} - B^{2} = (A + B)(A - B)$$

It is important to recognize multiplication problems that are similar to these examples. These equations can be written to demonstrate an important factoring pattern known as the <u>difference of two squares</u>.

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Consider the following problems.

 $(5x + 3)^2 = (5x + 3)(5x + 3) = 25x^2 +$

Consider the following problems.

 $(5x + 3)^2 = (5x + 3)(5x + 3) = 25x^2 + 15x$

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Consider the following problems.

 $(5x + 3)^2 = (5x + 3)(5x + 3) = 25x^2 + 15x + 15x + 9$

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Consider the following problems.

 $(5x + 3)^2 = (5x + 3)(5x + 3) = 25x^2 + 15x + 15x + 9 = 25x^2 + 30x + 9$

 $(7x-4)^2 = (7x-4)(7x-4)$

Consider the following problems.

 $(5x + 3)^2 = (5x + 3)(5x + 3) = 25x^2 + 15x + 15x + 9 = 25x^2 + 30x + 9$

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Consider the following problems.

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Consider the following problems.

 $(5x + 3)^{2} = 25x^{2} + 30x + 9$ $(7x - 4)^{2} = 49x^{2} - 56x + 16$ $(A + B)^{2} = A^{2} + 2AB + B^{2}$ $(A - B)^{2} = A^{2} - 2AB + B^{2}$

Consider the following problems.

 $(5x+3)^2 = 25x^2 + 30x + 9$

 $(7x-4)^2 = 49x^2 - 56x + 16$

 $(A + B)^2 = A^2 + 2AB + B^2$

$$(A - B)^2 = A^2 - 2AB + B^2$$

Consider the following problems.

```
(5x+3)^2 = 25x^2 + 30x + 9
```

 $(7x-4)^2 = 49x^2 - 56x + 16$

 $(A + B)^2 = A^2 + 2AB + B^2$

 $(A - B)^2 = A^2 - 2AB + B^2$

Consider the following problems.

 $(5x+3)^2 = 25x^2 + 30x + 9 \longrightarrow 25x^2 + 30x + 9 =$

 $(7x-4)^2 = 49x^2 - 56x + 16$

 $(A + B)^2 = A^2 + 2AB + B^2$

 $(A - B)^2 = A^2 - 2AB + B^2$

Consider the following problems.

 $(5x + 3)^{2} = 25x^{2} + 30x + 9 \implies 25x^{2} + 30x + 9 = (5x + 3)^{2}$ $(7x - 4)^{2} = 49x^{2} - 56x + 16$ $(A + B)^{2} = A^{2} + 2AB + B^{2}$ $(A - B)^{2} = A^{2} - 2AB + B^{2}$

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$$(5x + 3)^{2} = 25x^{2} + 30x + 9 \implies 25x^{2} + 30x + 9 = (5x + 3)^{2}$$
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$$(A + B)^{2} = A^{2} + 2AB + B^{2} \implies A^{2} + 2AB + B^{2} =$$
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$$(A-B)^2 = A^2 - 2AB + B^2 \longrightarrow A^2 - 2AB + B^2 =$$

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$$(A-B)^2 = A^2 - 2AB + B^2 \longrightarrow A^2 - 2AB + B^2 = (A-B)^2$$

- 1. (x+2)(x-2) =
- 2. (x-6)(x+6) =
- 3. (2x+3)(2x-3) =
- 4. (5x-7)(5x+7) =

$$(\mathbf{A} + \mathbf{B})(\mathbf{A} - \mathbf{B}) = \mathbf{A}^2 - \mathbf{B}^2$$

- 1. (x+2)(x-2) =
- 2. (x-6)(x+6) =
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$$(\mathbf{A} + \mathbf{B})(\mathbf{A} - \mathbf{B}) = \mathbf{A}^2 - \mathbf{B}^2$$

- 1. $(x+2)(x-2) = x^2$
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$$(\mathbf{A} + \mathbf{B})(\mathbf{A} - \mathbf{B}) = \mathbf{A}^2 - \mathbf{B}^2$$

1.
$$(x+2)(x-2) = x^2 - 2^2 =$$

2.
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1.
$$(x+2)(x-2) = x^2 - 2^2 = x^2 - x^2 -$$

2.
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4.
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$$(\mathbf{A} + \mathbf{B})(\mathbf{A} - \mathbf{B}) = \mathbf{A}^2 - \mathbf{B}^2$$

1.
$$(x+2)(x-2) = x^2 - 2^2 = x^2 - 4$$

2.
$$(x-6)(x+6) =$$

3.
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$$(\mathbf{A} + \mathbf{B})(\mathbf{A} - \mathbf{B}) = \mathbf{A}^2 - \mathbf{B}^2$$

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4.
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$$(\mathbf{A} + \mathbf{B})(\mathbf{A} - \mathbf{B}) = \mathbf{A}^2 - \mathbf{B}^2$$

1.
$$(x+2)(x-2) = x^2 - 2^2 = x^2 - 4$$

2.
$$(x-6)(x+6) = x^2 - 6^2 = x^2 - 36$$

3.
$$(2x+3)(2x-3) =$$

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

$$(\mathbf{A} + \mathbf{B})(\mathbf{A} - \mathbf{B}) = \mathbf{A}^2 - \mathbf{B}^2$$

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3.
$$(2x+3)(2x-3) = (2x)^2$$

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

$$(\mathbf{A} + \mathbf{B})(\mathbf{A} - \mathbf{B}) = \mathbf{A}^2 - \mathbf{B}^2$$

1.
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4.
$$(5x-7)(5x+7) =$$

$$(\mathbf{A} + \mathbf{B})(\mathbf{A} - \mathbf{B}) = \mathbf{A}^2 - \mathbf{B}^2$$

1.
$$(x+2)(x-2) = x^2 - 2^2 = x^2 - 4$$

2.
$$(x-6)(x+6) = x^2 - 6^2 = x^2 - 36$$

3.
$$(2x+3)(2x-3) = (2x)^2 - 3^2$$

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

$$(\mathbf{A} + \mathbf{B})(\mathbf{A} - \mathbf{B}) = \mathbf{A}^2 - \mathbf{B}^2$$

1.
$$(x+2)(x-2) = x^2 - 2^2 = x^2 - 4$$

2.
$$(x-6)(x+6) = x^2 - 6^2 = x^2 - 36$$

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$$(\mathbf{A} + \mathbf{B})(\mathbf{A} - \mathbf{B}) = \mathbf{A}^2 - \mathbf{B}^2$$

1.
$$(x+2)(x-2) = x^2 - 2^2 = x^2 - 4$$

2.
$$(x-6)(x+6) = x^2 - 6^2 = x^2 - 36$$

3.
$$(2x+3)(2x-3) = (2x)^2 - 3^2 = 4x^2$$

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

$$(\mathbf{A} + \mathbf{B})(\mathbf{A} - \mathbf{B}) = \mathbf{A}^2 - \mathbf{B}^2$$

1.
$$(x+2)(x-2) = x^2 - 2^2 = x^2 - 4$$

2.
$$(x-6)(x+6) = x^2 - 6^2 = x^2 - 36$$

3.
$$(2x+3)(2x-3) = (2x)^2 - 3^2 = 4x^2 - 4x^2 - 3x^2 = 4x^2 - 3x^2 - 3x^2 = 4x^2 - 3x^2 - 3x$$

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

$$(\mathbf{A} + \mathbf{B})(\mathbf{A} - \mathbf{B}) = \mathbf{A}^2 - \mathbf{B}^2$$

1.
$$(x+2)(x-2) = x^2 - 2^2 = x^2 - 4$$

2.
$$(x-6)(x+6) = x^2 - 6^2 = x^2 - 36$$

3.
$$(2x+3)(2x-3) = (2x)^2 - 3^2 = 4x^2 - 9$$

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

$$(\mathbf{A} + \mathbf{B})(\mathbf{A} - \mathbf{B}) = \mathbf{A}^2 - \mathbf{B}^2$$

1.
$$(x+2)(x-2) = x^2 - 2^2 = x^2 - 4$$

2.
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3.
$$(2x+3)(2x-3) = (2x)^2 - 3^2 = 4x^2 - 9$$

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

$$(\mathbf{A} + \mathbf{B})(\mathbf{A} - \mathbf{B}) = \mathbf{A}^2 - \mathbf{B}^2$$

1.
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$$(\mathbf{A} + \mathbf{B})(\mathbf{A} - \mathbf{B}) = \mathbf{A}^2 - \mathbf{B}^2$$

1.
$$(x+2)(x-2) = x^2 - 2^2 = x^2 - 4$$

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$$(x-6)(x+6) = x^2 - 6^2 = x^2 - 36$$

3.
$$(2x+3)(2x-3) = (2x)^2 - 3^2 = 4x^2 - 9$$

4.
$$(5x-7)(5x+7) = (5x)^2$$

$$(\mathbf{A} + \mathbf{B})(\mathbf{A} - \mathbf{B}) = \mathbf{A}^2 - \mathbf{B}^2$$

1.
$$(x+2)(x-2) = x^2 - 2^2 = x^2 - 4$$

2.
$$(x-6)(x+6) = x^2 - 6^2 = x^2 - 36$$

3.
$$(2x+3)(2x-3) = (2x)^2 - 3^2 = 4x^2 - 9$$

4.
$$(5x-7)(5x+7) = (5x)^2 - ($$

$$(\mathbf{A} + \mathbf{B})(\mathbf{A} - \mathbf{B}) = \mathbf{A}^2 - \mathbf{B}^2$$

1.
$$(x+2)(x-2) = x^2 - 2^2 = x^2 - 4$$

2.
$$(x-6)(x+6) = x^2 - 6^2 = x^2 - 36$$

3.
$$(2x+3)(2x-3) = (2x)^2 - 3^2 = 4x^2 - 9$$

4.
$$(5x-7)(5x+7) = (5x)^2 - 7^2$$

$$(\mathbf{A} + \mathbf{B})(\mathbf{A} - \mathbf{B}) = \mathbf{A}^2 - \mathbf{B}^2$$

1.
$$(x+2)(x-2) = x^2 - 2^2 = x^2 - 4$$

2.
$$(x-6)(x+6) = x^2 - 6^2 = x^2 - 36$$

3.
$$(2x+3)(2x-3) = (2x)^2 - 3^2 = 4x^2 - 9$$

4.
$$(5x-7)(5x+7) = (5x)^2 - 7^2 =$$

$$(\mathbf{A} + \mathbf{B})(\mathbf{A} - \mathbf{B}) = \mathbf{A}^2 - \mathbf{B}^2$$

1.
$$(x+2)(x-2) = x^2 - 2^2 = x^2 - 4$$

2.
$$(x-6)(x+6) = x^2 - 6^2 = x^2 - 36$$

3.
$$(2x+3)(2x-3) = (2x)^2 - 3^2 = 4x^2 - 9$$

4.
$$(5x-7)(5x+7) = (5x)^2 - 7^2 = 25x^2$$

$$(\mathbf{A} + \mathbf{B})(\mathbf{A} - \mathbf{B}) = \mathbf{A}^2 - \mathbf{B}^2$$

1.
$$(x+2)(x-2) = x^2 - 2^2 = x^2 - 4$$

2.
$$(x-6)(x+6) = x^2 - 6^2 = x^2 - 36$$

3.
$$(2x+3)(2x-3) = (2x)^2 - 3^2 = 4x^2 - 9$$

4.
$$(5x-7)(5x+7) = (5x)^2 - 7^2 = 25x^2 - 25x$$

$$(\mathbf{A} + \mathbf{B})(\mathbf{A} - \mathbf{B}) = \mathbf{A}^2 - \mathbf{B}^2$$

1.
$$(x+2)(x-2) = x^2 - 2^2 = x^2 - 4$$

2.
$$(x-6)(x+6) = x^2 - 6^2 = x^2 - 36$$

3.
$$(2x+3)(2x-3) = (2x)^2 - 3^2 = 4x^2 - 9$$

4.
$$(5x-7)(5x+7) = (5x)^2 - 7^2 = 25x^2 - 49$$

$$(\mathbf{A} + \mathbf{B})(\mathbf{A} - \mathbf{B}) = \mathbf{A}^2 - \mathbf{B}^2$$

1.
$$(x+2)(x-2) = x^2 - 2^2 = x^2 - 4$$

2.
$$(x-6)(x+6) = x^2 - 6^2 = x^2 - 36$$

3.
$$(2x+3)(2x-3) = (2x)^2 - 3^2 = 4x^2 - 9$$

4.
$$(5x-7)(5x+7) = (5x)^2 - 7^2 = 25x^2 - 49$$

$$(\mathbf{A} + \mathbf{B})(\mathbf{A} - \mathbf{B}) = \mathbf{A}^2 - \mathbf{B}^2$$

Algebra I Class Worksheet #3 Unit 11

5.
$$x^2 - 64 =$$

6.
$$x^2 - 100 =$$

7.
$$49x^2 - 16 =$$

8.
$$9x^2 - 1 =$$

$$\mathbf{A}^2 - \mathbf{B}^2 = (\mathbf{A} + \mathbf{B})(\mathbf{A} - \mathbf{B})$$

Algebra I Class Worksheet #3 Unit 11

5.
$$x^2 - 64 =$$

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5.
$$x^2 - 64 = x^2$$

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$$x^2 - 64 = x^2 - 8^2$$

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6.
$$x^2 - 100 =$$

7.
$$49x^2 - 16 =$$

8.
$$9x^2 - 1 =$$

$$\mathbf{A}^2 - \mathbf{B}^2 = (\mathbf{A} + \mathbf{B})(\mathbf{A} - \mathbf{B})$$

5.
$$x^2 - 64 = x^2 - 8^2 = (x - 8^2)^2$$

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$$x^{2} - 64 = x^{2} - 8^{2} = (x + 8)(x - 8)$$

6. $x^{2} - 100 = x^{2} - 10^{2} = (x + 10)(x - 10)$
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$$49x^2 - 16 = (7x)^2 - 4^2 = (7x + 4)(7x - 4)$$

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$$\mathbf{A}^2 - \mathbf{B}^2 = (\mathbf{A} + \mathbf{B})(\mathbf{A} - \mathbf{B})$$

9.
$$(x+3)^2 =$$

10.
$$(x + 5)^2 =$$

$$(A + B)^2 = A^2 + 2AB + B^2$$

9.
$$(x + 3)^2 =$$

10.
$$(x + 5)^2 =$$

$$(A + B)^2 = A^2 + 2AB + B^2$$

Algebra I Class Worksheet #3 Unit 11

9.
$$(x + 3)^2 =$$

 x^2

10.
$$(x + 5)^2 =$$

$$(A + B)^2 = A^2 + 2AB + B^2$$

9.
$$(x + 3)^2 =$$

10.
$$(x + 5)^2 =$$

$$(A + B)^2 = A^2 + 2AB + B^2$$

9. $(x + 3)^2 =$ _____ $x^2 + (2)(x)(3)$

10.
$$(x + 5)^2 =$$

$$(A + B)^2 = A^2 + 2AB + B^2$$

9. $(x + 3)^2 =$ _____ $x^2 + (2)(x)(3) +$

10.
$$(x + 5)^2 =$$

$$(A + B)^2 = A^2 + 2AB + B^2$$

9. $(x + 3)^2 =$ $x^2 + (2)(x)(3) + 3^2$

10.
$$(x + 5)^2 =$$

$$(A + B)^2 = A^2 + 2AB + B^2$$

9.
$$(x + 3)^2 = x^2$$

 $x^2 + (2)(x)(3) + 3^2$

10.
$$(x + 5)^2 =$$

$$(A + B)^2 = A^2 + 2AB + B^2$$

9.
$$(x + 3)^2 = x^2 + x^2 + (2)(x)(3) + 3^2$$

10.
$$(x + 5)^2 =$$

$$(A + B)^2 = A^2 + 2AB + B^2$$

9.
$$(x + 3)^2 = x^2 + 6x$$

 $x^2 + (2)(x)(3) + 3^2$

10.
$$(x + 5)^2 =$$

$$(A + B)^2 = A^2 + 2AB + B^2$$

9.
$$(x + 3)^2 = \underline{x^2 + 6x + x^2 + (2)(x)(3) + 3^2}$$

10.
$$(x + 5)^2 =$$

$$(A + B)^2 = A^2 + 2AB + B^2$$

9.
$$(x + 3)^2 = x^2 + 6x + 9$$

 $x^2 + (2)(x)(3) + 3^2$

10.
$$(x + 5)^2 =$$

$$(A + B)^2 = A^2 + 2AB + B^2$$

9.
$$(x + 3)^2 = x^2 + 6x + 9$$

 $x^2 + (2)(x)(3) + 3^2$

10.
$$(x + 5)^2 =$$

$$(A + B)^2 = A^2 + 2AB + B^2$$

9.
$$(x + 3)^2 = x^2 + 6x + 9$$

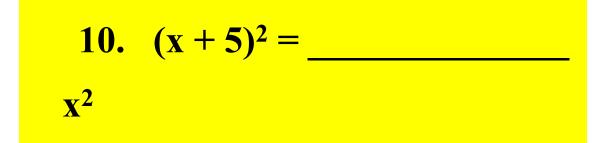
 $x^2 + (2)(x)(3) + 3^2$

10.
$$(x + 5)^2 =$$

$$(A + B)^2 = A^2 + 2AB + B^2$$

9.
$$(x + 3)^2 = x^2 + 6x + 9$$

 $x^2 + (2)(x)(3) + 3^2$



$$(A + B)^2 = A^2 + 2AB + B^2$$

9.
$$(x + 3)^2 = x^2 + 6x + 9$$

 $x^2 + (2)(x)(3) + 3^2$

10.
$$(x + 5)^2 =$$

$$(A + B)^2 = A^2 + 2AB + B^2$$

9.
$$(x + 3)^2 = x^2 + 6x + 9$$

 $x^2 + (2)(x)(3) + 3^2$

10.
$$(x + 5)^2 =$$

 $x^2 + (2)(x)(5)$

$$(A + B)^2 = A^2 + 2AB + B^2$$

9.
$$(x + 3)^2 = x^2 + 6x + 9$$

 $x^2 + (2)(x)(3) + 3^2$

10.
$$(x + 5)^2 =$$

 $x^2 + (2)(x)(5) +$

$$(A + B)^2 = A^2 + 2AB + B^2$$

9.
$$(x + 3)^2 = x^2 + 6x + 9$$

 $x^2 + (2)(x)(3) + 3^2$

10.
$$(x + 5)^2 =$$

 $x^2 + (2)(x)(5) + 5^2$

$$(A + B)^2 = A^2 + 2AB + B^2$$

9.
$$(x + 3)^2 = x^2 + 6x + 9$$

 $x^2 + (2)(x)(3) + 3^2$

10.
$$(x + 5)^2 = \underline{x^2}$$

 $x^2 + (2)(x)(5) + 5^2$

$$(A + B)^2 = A^2 + 2AB + B^2$$

9.
$$(x + 3)^2 = x^2 + 6x + 9$$

 $x^2 + (2)(x)(3) + 3^2$

10.
$$(x + 5)^2 = \underline{x^2 + x^2 + (2)(x)(5) + 5^2}$$

$$(A + B)^2 = A^2 + 2AB + B^2$$

9.
$$(x + 3)^2 = x^2 + 6x + 9$$

 $x^2 + (2)(x)(3) + 3^2$

10.
$$(x + 5)^2 = x^2 + 10x$$

 $x^2 + (2)(x)(5) + 5^2$

$$(A + B)^2 = A^2 + 2AB + B^2$$

9.
$$(x + 3)^2 = x^2 + 6x + 9$$

 $x^2 + (2)(x)(3) + 3^2$

10.
$$(x + 5)^2 = x^2 + 10x + x^2 + (2)(x)(5) + 5^2$$

$$(A + B)^2 = A^2 + 2AB + B^2$$

9.
$$(x + 3)^2 = \underline{x^2 + 6x + 9}$$

 $x^2 + (2)(x)(3) + 3^2$

10.
$$(x + 5)^2 = x^2 + 10x + 25$$

 $x^2 + (2)(x)(5) + 5^2$

$$(A + B)^2 = A^2 + 2AB + B^2$$

9.
$$(x + 3)^2 = x^2 + 6x + 9$$

 $x^2 + (2)(x)(3) + 3^2$

10.
$$(x + 5)^2 = x^2 + 10x + 25$$

 $x^2 + (2)(x)(5) + 5^2$

$$(A + B)^2 = A^2 + 2AB + B^2$$

11.
$$(x-2)^2 =$$

12.
$$(x-7)^2 =$$

$$(A - B)^2 = A^2 - 2AB + B^2$$

11.
$$(x-2)^2 =$$

12.
$$(x-7)^2 =$$

$$(A - B)^2 = A^2 - 2AB + B^2$$

11.
$$(x-2)^2 =$$

12.
$$(x-7)^2 =$$

$$(A - B)^2 = A^2 - 2AB + B^2$$

11.
$$(x-2)^2 =$$

12.
$$(x-7)^2 =$$

$$(A - B)^2 = A^2 - 2AB + B^2$$

11.
$$(x-2)^2 =$$

 $x^2 - (2)(x)(2)$

12.
$$(x-7)^2 =$$

$$(A - B)^2 = A^2 - 2AB + B^2$$

11.
$$(x-2)^2 =$$

 $x^2 - (2)(x)(2) +$

12.
$$(x-7)^2 =$$

$$(A - B)^2 = A^2 - 2AB + B^2$$

11.
$$(x-2)^2 =$$

 $x^2 - (2)(x)(2) + 2^2$

12.
$$(x-7)^2 =$$

$$(A - B)^2 = A^2 - 2AB + B^2$$

11.
$$(x-2)^2 = \underline{x^2}$$

 $x^2 - (2)(x)(2) + 2^2$

12.
$$(x-7)^2 =$$

$$(A - B)^2 = A^2 - 2AB + B^2$$

11.
$$(x-2)^2 = \underline{x^2} - \underline{x^2$$

12.
$$(x-7)^2 =$$

$$(A - B)^2 = A^2 - 2AB + B^2$$

11.
$$(x-2)^2 = x^2 - 4x$$

 $x^2 - (2)(x)(2) + 2^2$

12.
$$(x-7)^2 =$$

$$(A - B)^2 = A^2 - 2AB + B^2$$

11.
$$(x-2)^2 = x^2 - 4x + x^2 - (2)(x)(2) + 2^2$$

12.
$$(x-7)^2 =$$

$$(A - B)^2 = A^2 - 2AB + B^2$$

11.
$$(x-2)^2 = x^2 - 4x + 4$$

 $x^2 - (2)(x)(2) + 2^2$

12.
$$(x-7)^2 =$$

$$(A - B)^2 = A^2 - 2AB + B^2$$

11.
$$(x-2)^2 = \underline{x^2 - 4x + 4}$$

 $x^2 - (2)(x)(2) + 2^2$

12.
$$(x-7)^2 =$$

$$(A - B)^2 = A^2 - 2AB + B^2$$

11.
$$(x-2)^2 = \underline{x^2 - 4x + 4}$$

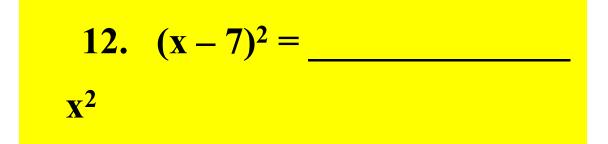
 $x^2 - (2)(x)(2) + 2^2$

12.
$$(x-7)^2 =$$

$$(A - B)^2 = A^2 - 2AB + B^2$$

11.
$$(x-2)^2 = x^2 - 4x + 4$$

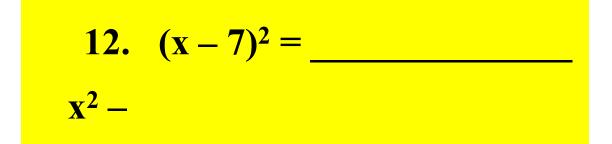
 $x^2 - (2)(x)(2) + 2^2$



$$(A - B)^2 = A^2 - 2AB + B^2$$

11.
$$(x-2)^2 = x^2 - 4x + 4$$

 $x^2 - (2)(x)(2) + 2^2$



$$(A - B)^2 = A^2 - 2AB + B^2$$

11.
$$(x-2)^2 = x^2 - 4x + 4$$

 $x^2 - (2)(x)(2) + 2^2$

12.
$$(x - 7)^2 =$$

 $x^2 - (2)(x)(7)$

$$(A - B)^2 = A^2 - 2AB + B^2$$

11.
$$(x-2)^2 = \underline{x^2 - 4x + 4}$$

 $x^2 - (2)(x)(2) + 2^2$

12.
$$(x - 7)^2 =$$

 $x^2 - (2)(x)(7) +$

$$(A - B)^2 = A^2 - 2AB + B^2$$

11.
$$(x-2)^2 = \underline{x^2 - 4x + 4}$$

 $x^2 - (2)(x)(2) + 2^2$

12.
$$(x - 7)^2 =$$

 $x^2 - (2)(x)(7) + 7^2$

$$(A - B)^2 = A^2 - 2AB + B^2$$

11.
$$(x-2)^2 = \underline{x^2 - 4x + 4}$$

 $x^2 - (2)(x)(2) + 2^2$

12.
$$(x - 7)^2 = \underline{x^2}$$

 $x^2 - (2)(x)(7) + 7^2$

$$(A - B)^2 = A^2 - 2AB + B^2$$

11.
$$(x-2)^2 = \underline{x^2 - 4x + 4}$$

 $x^2 - (2)(x)(2) + 2^2$

12.
$$(x - 7)^2 = \underline{x^2 - x^2 - x^2$$

$$(A - B)^2 = A^2 - 2AB + B^2$$

11.
$$(x-2)^2 = \underline{x^2 - 4x + 4}$$

 $x^2 - (2)(x)(2) + 2^2$

12.
$$(x - 7)^2 = \underline{x^2 - 14x}$$

 $x^2 - (2)(x)(7) + 7^2$

$$(A - B)^2 = A^2 - 2AB + B^2$$

11.
$$(x-2)^2 = \underline{x^2 - 4x + 4}$$

 $x^2 - (2)(x)(2) + 2^2$

12.
$$(x - 7)^2 = \underline{x^2 - 14x + x^2 - (2)(x)(7) + 7^2}$$

$$(A - B)^2 = A^2 - 2AB + B^2$$

11.
$$(x-2)^2 = \underline{x^2 - 4x + 4}$$

 $x^2 - (2)(x)(2) + 2^2$

12.
$$(x - 7)^2 = \underline{x^2 - 14x + 49}$$

 $x^2 - (2)(x)(7) + 7^2$

$$(A - B)^2 = A^2 - 2AB + B^2$$

11.
$$(x-2)^2 = \underline{x^2 - 4x + 4}$$

 $x^2 - (2)(x)(2) + 2^2$

12.
$$(x-7)^2 = \underline{x^2 - 14x + 49}$$

 $x^2 - (2)(x)(7) + 7^2$

$$(A - B)^2 = A^2 - 2AB + B^2$$

13.
$$(3x+2)^2 =$$

14.
$$(4x + 1)^2 =$$

$$(A + B)^2 = A^2 + 2AB + B^2$$

13.
$$(3x + 2)^2 =$$

14.
$$(4x + 1)^2 =$$

$$(A + B)^2 = A^2 + 2AB + B^2$$

14.
$$(4x + 1)^2 =$$

$$(A + B)^2 = A^2 + 2AB + B^2$$

13. $(3x + 2)^2 =$ ______ $(3x)^2 +$

14.
$$(4x + 1)^2 =$$

$$(A + B)^2 = A^2 + 2AB + B^2$$

13. $(3x + 2)^2 =$ ______ $(3x)^2 + (2)(3x)(2)$

14.
$$(4x + 1)^2 =$$

$$(A + B)^2 = A^2 + 2AB + B^2$$

13. $(3x + 2)^2 =$ $(3x)^2 + (2)(3x)(2) +$

14.
$$(4x + 1)^2 =$$

$$(A + B)^2 = A^2 + 2AB + B^2$$

13. $(3x + 2)^2 =$ $(3x)^2 + (2)(3x)(2) + 2^2$

14.
$$(4x + 1)^2 =$$

$$(A + B)^2 = A^2 + 2AB + B^2$$

13.
$$(3x+2)^2 = 9x^2$$

 $(3x)^2 + (2)(3x)(2) + 2^2$

14.
$$(4x + 1)^2 =$$

$$(A + B)^2 = A^2 + 2AB + B^2$$

13.
$$(3x+2)^2 = 9x^2 + 3x^2$$

 $(3x)^2 + (2)(3x)(2) + 2^2$

14.
$$(4x + 1)^2 =$$

$$(A + B)^2 = A^2 + 2AB + B^2$$

13.
$$(3x + 2)^2 = 9x^2 + 12x$$

 $(3x)^2 + (2)(3x)(2) + 2^2$

14.
$$(4x + 1)^2 =$$

$$(A + B)^2 = A^2 + 2AB + B^2$$

13.
$$(3x + 2)^2 = 9x^2 + 12x + (3x)^2 + (2)(3x)(2) + 2^2$$

14.
$$(4x + 1)^2 =$$

$$(A + B)^2 = A^2 + 2AB + B^2$$

13.
$$(3x + 2)^2 = 9x^2 + 12x + 4$$

 $(3x)^2 + (2)(3x)(2) + 2^2$

14.
$$(4x + 1)^2 =$$

$$(A + B)^2 = A^2 + 2AB + B^2$$

13. $(3x + 2)^2 = 9x^2 + 12x + 4$ $(3x)^2 + (2)(3x)(2) + 2^2$

14. $(4x + 1)^2 =$ _____

$$(A + B)^2 = A^2 + 2AB + B^2$$

13. $(3x + 2)^2 = 9x^2 + 12x + 4$ $(3x)^2 + (2)(3x)(2) + 2^2$

14.
$$(4x + 1)^2 =$$

$$(A + B)^2 = A^2 + 2AB + B^2$$

13. $(3x + 2)^2 = 9x^2 + 12x + 4$ $(3x)^2 + (2)(3x)(2) + 2^2$

14.
$$(4x + 1)^2 =$$
______(4x)^2

$$(A + B)^2 = A^2 + 2AB + B^2$$

13. $(3x + 2)^2 = 9x^2 + 12x + 4$ $(3x)^2 + (2)(3x)(2) + 2^2$

14.
$$(4x + 1)^2 =$$

 $(4x)^2 +$

$$(A + B)^2 = A^2 + 2AB + B^2$$

13. $(3x + 2)^2 = 9x^2 + 12x + 4$ $(3x)^2 + (2)(3x)(2) + 2^2$

14. $(4x + 1)^2 =$ $(4x)^2 + (2)(4x)(1)$

$$(A + B)^2 = A^2 + 2AB + B^2$$

13. $(3x + 2)^2 = 9x^2 + 12x + 4$ $(3x)^2 + (2)(3x)(2) + 2^2$

14. $(4x + 1)^2 =$ $(4x)^2 + (2)(4x)(1) +$

$$(A + B)^2 = A^2 + 2AB + B^2$$

13. $(3x + 2)^2 = 9x^2 + 12x + 4$ $(3x)^2 + (2)(3x)(2) + 2^2$

14. $(4x + 1)^2 =$ $(4x)^2 + (2)(4x)(1) + 1^2$

$$(A + B)^2 = A^2 + 2AB + B^2$$

13. $(3x + 2)^2 = 9x^2 + 12x + 4$ $(3x)^2 + (2)(3x)(2) + 2^2$

14. $(4x + 1)^2 = 16x^2$ $(4x)^2 + (2)(4x)(1) + 1^2$

$$(A + B)^2 = A^2 + 2AB + B^2$$

13. $(3x + 2)^2 = 9x^2 + 12x + 4$ $(3x)^2 + (2)(3x)(2) + 2^2$

14. $(4x + 1)^2 = 16x^2 + (4x)^2 + (2)(4x)(1) + 1^2$

$$(A + B)^2 = A^2 + 2AB + B^2$$

13. $(3x + 2)^2 = 9x^2 + 12x + 4$ $(3x)^2 + (2)(3x)(2) + 2^2$

14. $(4x + 1)^2 = 16x^2 + 8x$ $(4x)^2 + (2)(4x)(1) + 1^2$

$$(A + B)^2 = A^2 + 2AB + B^2$$

13. $(3x + 2)^2 = 9x^2 + 12x + 4$ $(3x)^2 + (2)(3x)(2) + 2^2$

14. $(4x + 1)^2 = 16x^2 + 8x + (4x)^2 + (2)(4x)(1) + 1^2$

$$(A + B)^2 = A^2 + 2AB + B^2$$

13. $(3x + 2)^2 = 9x^2 + 12x + 4$ $(3x)^2 + (2)(3x)(2) + 2^2$

14. $(4x + 1)^2 = 16x^2 + 8x + 1$ $(4x)^2 + (2)(4x)(1) + 1^2$

$$(A + B)^2 = A^2 + 2AB + B^2$$

13. $(3x + 2)^2 = 9x^2 + 12x + 4$ $(3x)^2 + (2)(3x)(2) + 2^2$

14. $(4x + 1)^2 = 16x^2 + 8x + 1$ $(4x)^2 + (2)(4x)(1) + 1^2$

$$(A + B)^2 = A^2 + 2AB + B^2$$

15.
$$(3x-5)^2 =$$

16.
$$(2x-7)^2 =$$

$$(A - B)^2 = A^2 - 2AB + B^2$$

15.
$$(3x-5)^2 =$$

16.
$$(2x-7)^2 =$$

$$(A - B)^2 = A^2 - 2AB + B^2$$

16.
$$(2x-7)^2 =$$

$$(A - B)^2 = A^2 - 2AB + B^2$$

16.
$$(2x-7)^2 =$$

$$(A - B)^2 = A^2 - 2AB + B^2$$

Perform the indicated operations.

15. $(3x-5)^2 =$ $(3x)^2 - (2)(3x)(5)$

16.
$$(2x-7)^2 =$$

$$(A - B)^2 = A^2 - 2AB + B^2$$

Perform the indicated operations.

15. $(3x-5)^2 =$ $(3x)^2 - (2)(3x)(5) +$

16.
$$(2x-7)^2 =$$

$$(A - B)^2 = A^2 - 2AB + B^2$$

15. $(3x-5)^2 =$ $(3x)^2 - (2)(3x)(5) + 5^2$

16.
$$(2x-7)^2 =$$

$$(A - B)^2 = A^2 - 2AB + B^2$$

15.
$$(3x-5)^2 = 9x^2$$

 $(3x)^2 - (2)(3x)(5) + 5^2$

16.
$$(2x-7)^2 =$$

$$(A - B)^2 = A^2 - 2AB + B^2$$

15.
$$(3x-5)^2 = 9x^2 - (3x)^2 - (2)(3x)(5) + 5^2$$

16.
$$(2x-7)^2 =$$

$$(A - B)^2 = A^2 - 2AB + B^2$$

15.
$$(3x-5)^2 = 9x^2 - 30x$$

 $(3x)^2 - (2)(3x)(5) + 5^2$

16.
$$(2x-7)^2 =$$

$$(A - B)^2 = A^2 - 2AB + B^2$$

15.
$$(3x-5)^2 = 9x^2 - 30x + (3x)^2 - (2)(3x)(5) + 5^2$$

16.
$$(2x-7)^2 =$$

$$(A - B)^2 = A^2 - 2AB + B^2$$

15.
$$(3x-5)^2 = 9x^2 - 30x + 25$$

 $(3x)^2 - (2)(3x)(5) + 5^2$

16.
$$(2x-7)^2 =$$

$$(A - B)^2 = A^2 - 2AB + B^2$$

15.
$$(3x-5)^2 = 9x^2 - 30x + 25$$

 $(3x)^2 - (2)(3x)(5) + 5^2$

16.
$$(2x-7)^2 =$$

$$(A - B)^2 = A^2 - 2AB + B^2$$

15.
$$(3x-5)^2 = 9x^2 - 30x + 25$$

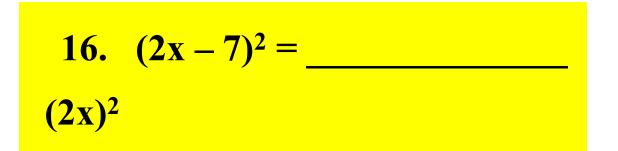
 $(3x)^2 - (2)(3x)(5) + 5^2$

16.
$$(2x - 7)^2 =$$

$$(A - B)^2 = A^2 - 2AB + B^2$$

15.
$$(3x-5)^2 = 9x^2 - 30x + 25$$

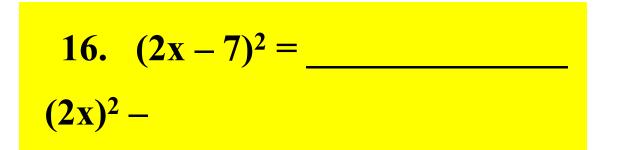
 $(3x)^2 - (2)(3x)(5) + 5^2$



$$(A - B)^2 = A^2 - 2AB + B^2$$

15.
$$(3x-5)^2 = 9x^2 - 30x + 25$$

 $(3x)^2 - (2)(3x)(5) + 5^2$



$$(A - B)^2 = A^2 - 2AB + B^2$$

15.
$$(3x-5)^2 = 9x^2 - 30x + 25$$

 $(3x)^2 - (2)(3x)(5) + 5^2$

16.
$$(2x - 7)^2 =$$

 $(2x)^2 - (2)(2x)(7)$

$$(A - B)^2 = A^2 - 2AB + B^2$$

15.
$$(3x-5)^2 = 9x^2 - 30x + 25$$

 $(3x)^2 - (2)(3x)(5) + 5^2$

16.
$$(2x - 7)^2 =$$

 $(2x)^2 - (2)(2x)(7) +$

$$(A - B)^2 = A^2 - 2AB + B^2$$

15.
$$(3x-5)^2 = 9x^2 - 30x + 25$$

 $(3x)^2 - (2)(3x)(5) + 5^2$

16.
$$(2x - 7)^2 =$$

 $(2x)^2 - (2)(2x)(7) + 7^2$

$$(A - B)^2 = A^2 - 2AB + B^2$$

15.
$$(3x-5)^2 = 9x^2 - 30x + 25$$

 $(3x)^2 - (2)(3x)(5) + 5^2$

16.
$$(2x - 7)^2 = 4x^2$$

 $(2x)^2 - (2)(2x)(7) + 7^2$

$$(A - B)^2 = A^2 - 2AB + B^2$$

15.
$$(3x-5)^2 = 9x^2 - 30x + 25$$

 $(3x)^2 - (2)(3x)(5) + 5^2$

16.
$$(2x - 7)^2 = 4x^2 - (2x)^2 - (2)(2x)(7) + 7^2$$

$$(A - B)^2 = A^2 - 2AB + B^2$$

15.
$$(3x-5)^2 = 9x^2 - 30x + 25$$

 $(3x)^2 - (2)(3x)(5) + 5^2$

16.
$$(2x - 7)^2 = 4x^2 - 28x$$

 $(2x)^2 - (2)(2x)(7) + 7^2$

$$(A - B)^2 = A^2 - 2AB + B^2$$

15.
$$(3x-5)^2 = 9x^2 - 30x + 25$$

 $(3x)^2 - (2)(3x)(5) + 5^2$

16.
$$(2x - 7)^2 = 4x^2 - 28x + (2x)^2 - (2)(2x)(7) + 7^2$$

$$(A - B)^2 = A^2 - 2AB + B^2$$

15.
$$(3x-5)^2 = 9x^2 - 30x + 25$$

 $(3x)^2 - (2)(3x)(5) + 5^2$

16.
$$(2x - 7)^2 = 4x^2 - 28x + 49$$

 $(2x)^2 - (2)(2x)(7) + 7^2$

$$(A - B)^2 = A^2 - 2AB + B^2$$

15. $(3x-5)^2 = 9x^2 - 30x + 25$ $(3x)^2 - (2)(3x)(5) + 5^2$

16.
$$(2x - 7)^2 = 4x^2 - 28x + 49$$

 $(2x)^2 - (2)(2x)(7) + 7^2$

$$(A - B)^2 = A^2 - 2AB + B^2$$

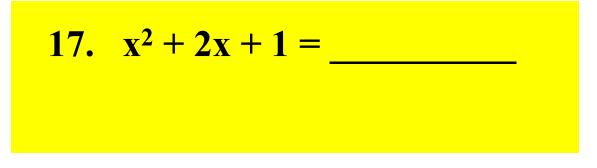
Factor each of the following.

17. $x^2 + 2x + 1 =$

18. $x^2 + 12x + 36 =$

$A^2 + 2AB + B^2 = (A + B)^2$

Factor each of the following.



18. $x^2 + 12x + 36 =$ _____

$A^2 + 2AB + B^2 = (A + B)^2$

Factor each of the following.

17.
$$x^2 + 2x + 1 =$$

 x^2

$$A^2 + 2AB + B^2 = (A + B)^2$$

Factor each of the following.

17.
$$x^2 + 2x + 1 =$$

 $x^2 +$

$$A^2 + 2AB + B^2 = (A + B)^2$$

Factor each of the following.

17. $x^2 + 2x + 1 =$ ______ $x^2 + (2)(x)(1)$

$$A^2 + 2AB + B^2 = (A + B)^2$$

17. $x^2 + 2x + 1 =$ _____ $x^2 + (2)(x)(1) +$

$$A^2 + 2AB + B^2 = (A + B)^2$$

17. $x^2 + 2x + 1 =$ $x^2 + (2)(x)(1) + 1^2$

$$A^2 + 2AB + B^2 = (A + B)^2$$

17.
$$x^2 + 2x + 1 = (x - x^2 + (2)(x)(1) + 1^2)$$

18.
$$x^2 + 12x + 36 =$$

$$A^2 + 2AB + B^2 = (A + B)^2$$

17.
$$x^2 + 2x + 1 = (x + x^2 + (2)(x)(1) + 1^2)$$

18.
$$x^2 + 12x + 36 =$$

$$A^2 + 2AB + B^2 = (A + B)^2$$

17.
$$x^2 + 2x + 1 = (x + 1)$$

 $x^2 + (2)(x)(1) + 1^2$

18.
$$x^2 + 12x + 36 =$$

$$A^2 + 2AB + B^2 = (A + B)^2$$

17.
$$x^2 + 2x + 1 = (x + 1)^2$$

 $x^2 + (2)(x)(1) + 1^2$

$$A^2 + 2AB + B^2 = (A + B)^2$$

17. $x^2 + 2x + 1 = (x + 1)^2$ $x^2 + (2)(x)(1) + 1^2$

$$A^2 + 2AB + B^2 = (A + B)^2$$

17.
$$x^2 + 2x + 1 = (x + 1)^2$$

 $x^2 + (2)(x)(1) + 1^2$

18.
$$x^2 + 12x + 36 =$$

$$A^2 + 2AB + B^2 = (A + B)^2$$

17.
$$x^2 + 2x + 1 = (x + 1)^2$$

 $x^2 + (2)(x)(1) + 1^2$

18.
$$x^2 + 12x + 36 =$$

$$A^2 + 2AB + B^2 = (A + B)^2$$

17.
$$x^2 + 2x + 1 = (x + 1)^2$$

 $x^2 + (2)(x)(1) + 1^2$

18.
$$x^2 + 12x + 36 =$$

$$A^2 + 2AB + B^2 = (A + B)^2$$

17.
$$x^2 + 2x + 1 = (x + 1)^2$$

 $x^2 + (2)(x)(1) + 1^2$

18.
$$x^2 + 12x + 36 =$$

 $x^2 + (2)(x)(6)$

$$A^2 + 2AB + B^2 = (A + B)^2$$

17.
$$x^2 + 2x + 1 = (x + 1)^2$$

 $x^2 + (2)(x)(1) + 1^2$

18.
$$x^2 + 12x + 36 =$$

 $x^2 + (2)(x)(6) +$

$$A^2 + 2AB + B^2 = (A + B)^2$$

17.
$$x^2 + 2x + 1 = (x + 1)^2$$

 $x^2 + (2)(x)(1) + 1^2$

$$A^2 + 2AB + B^2 = (A + B)^2$$

17.
$$x^2 + 2x + 1 = (x + 1)^2$$

 $x^2 + (2)(x)(1) + 1^2$

18.
$$x^2 + 12x + 36 = (x - x^2 + (2)(x)(6) + 6^2)$$

$$A^2 + 2AB + B^2 = (A + B)^2$$

17.
$$x^2 + 2x + 1 = (x + 1)^2$$

 $x^2 + (2)(x)(1) + 1^2$

18.
$$x^2 + 12x + 36 = (x + x^2 + (2)(x)(6) + 6^2)$$

$$A^2 + 2AB + B^2 = (A + B)^2$$

17.
$$x^2 + 2x + 1 = (x + 1)^2$$

 $x^2 + (2)(x)(1) + 1^2$

18.
$$x^2 + 12x + 36 = (x + 6)$$

 $x^2 + (2)(x)(6) + 6^2$

$$A^2 + 2AB + B^2 = (A + B)^2$$

17.
$$x^2 + 2x + 1 = (x + 1)^2$$

 $x^2 + (2)(x)(1) + 1^2$

18.
$$x^2 + 12x + 36 = (x + 6)^2$$

 $x^2 + (2)(x)(6) + 6^2$

$$A^2 + 2AB + B^2 = (A + B)^2$$

17. $x^2 + 2x + 1 = (x + 1)^2$ $x^2 + (2)(x)(1) + 1^2$

18.
$$x^2 + 12x + 36 = (x + 6)^2$$

 $x^2 + (2)(x)(6) + 6^2$

$$A^2 + 2AB + B^2 = (A + B)^2$$

Algebra I Class Worksheet #3 Unit 11

Factor each of the following.

19.
$$x^2 - 8x + 16 =$$

$$A^2 - 2AB + B^2 = (A - B)^2$$

19.
$$x^2 - 8x + 16 =$$

$$A^2 - 2AB + B^2 = (A - B)^2$$

19.
$$x^2 - 8x + 16 =$$

 $20. \quad x^2 - 20x + 100 =$

$$A^2 - 2AB + B^2 = (A - B)^2$$

19.
$$x^2 - 8x + 16 =$$

20. $x^2 - 20x + 100 =$ ____

$$A^2 - 2AB + B^2 = (A - B)^2$$

19.
$$x^2 - 8x + 16 =$$

 $x^2 - (2)(x)(4)$

$$A^2 - 2AB + B^2 = (A - B)^2$$

19.
$$x^2 - 8x + 16 =$$

 $x^2 - (2)(x)(4) +$

$$A^2 - 2AB + B^2 = (A - B)^2$$

19. $x^2 - 8x + 16 =$ $x^2 - (2)(x)(4) + 4^2$

$$A^2 - 2AB + B^2 = (A - B)^2$$

19.
$$x^2 - 8x + 16 = (x - x^2 - (2)(x)(4) + 4^2)$$

$$A^2 - 2AB + B^2 = (A - B)^2$$

19.
$$x^2 - 8x + 16 = (x - x^2 - (2)(x)(4) + 4^2)$$

$$A^2 - 2AB + B^2 = (A - B)^2$$

19.
$$x^2 - 8x + 16 = (x - 4)$$

 $x^2 - (2)(x)(4) + 4^2$

$$A^2 - 2AB + B^2 = (A - B)^2$$

19.
$$x^2 - 8x + 16 = (x - 4)^2$$

 $x^2 - (2)(x)(4) + 4^2$

$$A^2 - 2AB + B^2 = (A - B)^2$$

19.
$$x^2 - 8x + 16 = (x - 4)^2$$

 $x^2 - (2)(x)(4) + 4^2$

$$A^2 - 2AB + B^2 = (A - B)^2$$

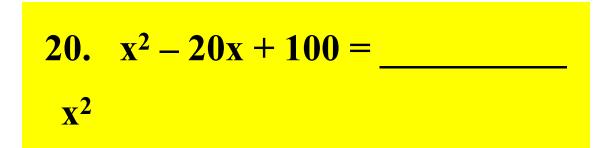
19.
$$x^2 - 8x + 16 = (x - 4)^2$$

 $x^2 - (2)(x)(4) + 4^2$

$$A^2 - 2AB + B^2 = (A - B)^2$$

19.
$$x^2 - 8x + 16 = (x - 4)^2$$

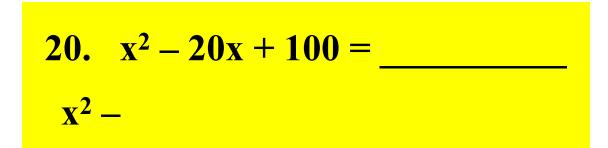
 $x^2 - (2)(x)(4) + 4^2$



$$A^2 - 2AB + B^2 = (A - B)^2$$

19.
$$x^2 - 8x + 16 = (x - 4)^2$$

 $x^2 - (2)(x)(4) + 4^2$



$$A^2 - 2AB + B^2 = (A - B)^2$$

19.
$$x^2 - 8x + 16 = (x - 4)^2$$

 $x^2 - (2)(x)(4) + 4^2$

20. $x^2 - 20x + 100 =$ ______ $x^2 - (2)(x)(10)$

$$A^2 - 2AB + B^2 = (A - B)^2$$

19.
$$x^2 - 8x + 16 = (x - 4)^2$$

 $x^2 - (2)(x)(4) + 4^2$

20. $x^2 - 20x + 100 =$ _______ $x^2 - (2)(x)(10) +$

$$A^2 - 2AB + B^2 = (A - B)^2$$

19.
$$x^2 - 8x + 16 = (x - 4)^2$$

 $x^2 - (2)(x)(4) + 4^2$

$$A^2 - 2AB + B^2 = (A - B)^2$$

19.
$$x^2 - 8x + 16 = (x - 4)^2$$

 $x^2 - (2)(x)(4) + 4^2$

20. $x^2 - 20x + 100 = (x - x^2 - (2)(x)(10) + 10^2)$

$$A^2 - 2AB + B^2 = (A - B)^2$$

19.
$$x^2 - 8x + 16 = (x - 4)^2$$

 $x^2 - (2)(x)(4) + 4^2$

20.
$$x^2 - 20x + 100 = (x - x^2 - (2)(x)(10) + 10^2)$$

$$A^2 - 2AB + B^2 = (A - B)^2$$

19.
$$x^2 - 8x + 16 = (x - 4)^2$$

 $x^2 - (2)(x)(4) + 4^2$

20. $x^2 - 20x + 100 = (x - 10)$ $x^2 - (2)(x)(10) + 10^2$

$$A^2 - 2AB + B^2 = (A - B)^2$$

19.
$$x^2 - 8x + 16 = (x - 4)^2$$

 $x^2 - (2)(x)(4) + 4^2$

20. $x^2 - 20x + 100 = (x - 10)^2$ $x^2 - (2)(x)(10) + 10^2$

$$A^2 - 2AB + B^2 = (A - B)^2$$

19.
$$x^2 - 8x + 16 = (x - 4)^2$$

 $x^2 - (2)(x)(4) + 4^2$

20.
$$x^2 - 20x + 100 = (x - 10)^2$$

 $x^2 - (2)(x)(10) + 10^2$

$$A^2 - 2AB + B^2 = (A - B)^2$$

Algebra I Class Worksheet #3 Unit 11

Factor each of the following.

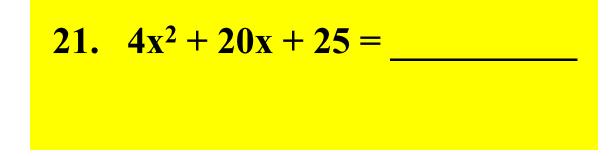
21. $4x^2 + 20x + 25 =$

22. $9x^2 + 30x + 25 =$

$A^2 + 2AB + B^2 = (A + B)^2$

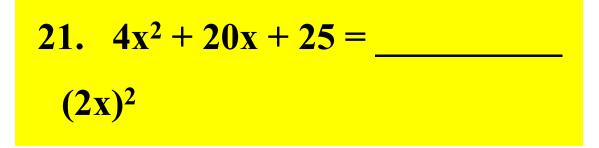
Algebra I Class Worksheet #3 Unit 11

Factor each of the following.



22. $9x^2 + 30x + 25 =$ _____

$A^2 + 2AB + B^2 = (A + B)^2$



22. $9x^2 + 30x + 25 =$ _____

$$A^2 + 2AB + B^2 = (A + B)^2$$

22. $9x^2 + 30x + 25 =$

$$A^2 + 2AB + B^2 = (A + B)^2$$

21. $4x^2 + 20x + 25 =$ ______ $(2x)^2 + (2)(2x)(5)$

22. $9x^2 + 30x + 25 =$ _____

$$A^2 + 2AB + B^2 = (A + B)^2$$

 $21. \quad 4x^2 + 20x + 25 =$

 $(2x)^2 + (2)(2x)(5) +$

22. $9x^2 + 30x + 25 =$ ____

$$A^2 + 2AB + B^2 = (A + B)^2$$

 $21. \quad 4x^2 + 20x + 25 = _$

 $(2x)^2 + (2)(2x)(5) + 5^2$

22. $9x^2 + 30x + 25 =$

$$A^2 + 2AB + B^2 = (A + B)^2$$

$$21. \quad 4x^2 + 20x + 25 = (2x)$$

 $(2x)^2 + (2)(2x)(5) + 5^2$

22. $9x^2 + 30x + 25 =$ _____

$$A^2 + 2AB + B^2 = (A + B)^2$$

21.
$$4x^2 + 20x + 25 = (2x + (2x)^2 + (2)(2x)(5) + 5^2)$$

22. $9x^2 + 30x + 25 =$ _____

$$A^2 + 2AB + B^2 = (A + B)^2$$

21.
$$4x^2 + 20x + 25 = (2x + 5)$$

 $(2x)^2 + (2)(2x)(5) + 5^2$

22. $9x^2 + 30x + 25 =$ _____

$$A^2 + 2AB + B^2 = (A + B)^2$$

21.
$$4x^2 + 20x + 25 = (2x + 5)^2$$

 $(2x)^2 + (2)(2x)(5) + 5^2$

22. $9x^2 + 30x + 25 =$ _____

$$A^2 + 2AB + B^2 = (A + B)^2$$

21. $4x^2 + 20x + 25 = (2x + 5)^2$ $(2x)^2 + (2)(2x)(5) + 5^2$

22. $9x^2 + 30x + 25 =$

$$A^2 + 2AB + B^2 = (A + B)^2$$

21.
$$4x^2 + 20x + 25 = (2x + 5)^2$$

 $(2x)^2 + (2)(2x)(5) + 5^2$

22. $9x^2 + 30x + 25 =$

$$A^2 + 2AB + B^2 = (A + B)^2$$

21.
$$4x^2 + 20x + 25 = (2x + 5)^2$$

 $(2x)^2 + (2)(2x)(5) + 5^2$

22.
$$9x^2 + 30x + 25 =$$
 _________(3x)^2

$$A^2 + 2AB + B^2 = (A + B)^2$$

21.
$$4x^2 + 20x + 25 = (2x + 5)^2$$

 $(2x)^2 + (2)(2x)(5) + 5^2$

$$A^2 + 2AB + B^2 = (A + B)^2$$

21.
$$4x^2 + 20x + 25 = (2x + 5)^2$$

 $(2x)^2 + (2)(2x)(5) + 5^2$

22. $9x^2 + 30x + 25 =$ ______ $(3x)^2 + (2)(3x)(5)$

$$A^2 + 2AB + B^2 = (A + B)^2$$

21.
$$4x^2 + 20x + 25 = (2x + 5)^2$$

 $(2x)^2 + (2)(2x)(5) + 5^2$

22. $9x^2 + 30x + 25 =$ ______ $(3x)^2 + (2)(3x)(5) +$

$$A^2 + 2AB + B^2 = (A + B)^2$$

21. $4x^2 + 20x + 25 = (2x + 5)^2$ $(2x)^2 + (2)(2x)(5) + 5^2$

22. $9x^2 + 30x + 25 =$ (3x)² + (2)(3x)(5) + 5²

$$A^2 + 2AB + B^2 = (A + B)^2$$

21. $4x^2 + 20x + 25 = (2x + 5)^2$ $(2x)^2 + (2)(2x)(5) + 5^2$

22. $9x^2 + 30x + 25 = (3x)^2 + (2)(3x)(5) + 5^2$

$$A^2 + 2AB + B^2 = (A + B)^2$$

21. $4x^2 + 20x + 25 = (2x + 5)^2$ $(2x)^2 + (2)(2x)(5) + 5^2$

22. $9x^2 + 30x + 25 = (3x + (3x)^2 + (2)(3x)(5) + 5^2)$

$$A^2 + 2AB + B^2 = (A + B)^2$$

21. $4x^2 + 20x + 25 = (2x + 5)^2$ $(2x)^2 + (2)(2x)(5) + 5^2$

22. $9x^2 + 30x + 25 = (3x + 5)$ $(3x)^2 + (2)(3x)(5) + 5^2$

$$A^2 + 2AB + B^2 = (A + B)^2$$

21. $4x^2 + 20x + 25 = (2x + 5)^2$ $(2x)^2 + (2)(2x)(5) + 5^2$

22. $9x^2 + 30x + 25 = (3x + 5)^2$ $(3x)^2 + (2)(3x)(5) + 5^2$

$$A^2 + 2AB + B^2 = (A + B)^2$$

21. $4x^2 + 20x + 25 = (2x + 5)^2$ $(2x)^2 + (2)(2x)(5) + 5^2$

22. $9x^2 + 30x + 25 = (3x + 5)^2$ $(3x)^2 + (2)(3x)(5) + 5^2$

$$A^2 + 2AB + B^2 = (A + B)^2$$

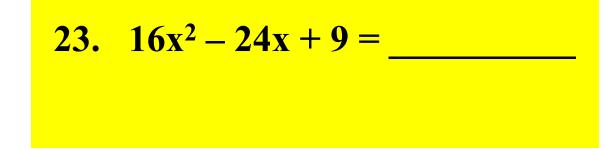
Algebra I Class Worksheet #3 Unit 11

Factor each of the following.

 $23. \quad 16x^2 - 24x + 9 = _$

 $24. \quad 9x^2 - 6x + 1 =$

$$A^2 - 2AB + B^2 = (A - B)^2$$



24. $9x^2 - 6x + 1 =$ ____

$$A^2 - 2AB + B^2 = (A - B)^2$$

23. $16x^2 - 24x + 9 =$ ______ (4x)²

24. $9x^2 - 6x + 1 =$ ____

$$A^2 - 2AB + B^2 = (A - B)^2$$

23.
$$16x^2 - 24x + 9 =$$

 $(4x)^2 -$

$$A^2 - 2AB + B^2 = (A - B)^2$$

 $23. \quad 16x^2 - 24x + 9 = _$

 $(4x)^2 - (2)(4x)(3)$

$$A^2 - 2AB + B^2 = (A - B)^2$$

23. $16x^2 - 24x + 9 =$

 $(4x)^2 - (2)(4x)(3) +$

$$A^2 - 2AB + B^2 = (A - B)^2$$

 $23. \quad 16x^2 - 24x + 9 =$

 $(4x)^2 - (2)(4x)(3) + 3^2$

$$A^2 - 2AB + B^2 = (A - B)^2$$

$$23. \quad 16x^2 - 24x + 9 = (4x)$$

 $(4x)^2 - (2)(4x)(3) + 3^2$

$$A^2 - 2AB + B^2 = (A - B)^2$$

23.
$$16x^2 - 24x + 9 = (4x - (4x)^2 - (2)(4x)(3) + 3^2)$$

$$A^2 - 2AB + B^2 = (A - B)^2$$

23.
$$16x^2 - 24x + 9 = (4x - 3)$$

 $(4x)^2 - (2)(4x)(3) + 3^2$

$$A^2 - 2AB + B^2 = (A - B)^2$$

23.
$$16x^2 - 24x + 9 = (4x - 3)^2$$

 $(4x)^2 - (2)(4x)(3) + 3^2$

$$A^2 - 2AB + B^2 = (A - B)^2$$

23.
$$16x^2 - 24x + 9 = (4x - 3)^2$$

 $(4x)^2 - (2)(4x)(3) + 3^2$

 $24. \quad 9x^2 - 6x + 1 =$

$$A^2 - 2AB + B^2 = (A - B)^2$$

23.
$$16x^2 - 24x + 9 = (4x - 3)^2$$

 $(4x)^2 - (2)(4x)(3) + 3^2$

$$A^2 - 2AB + B^2 = (A - B)^2$$

23.
$$16x^2 - 24x + 9 = (4x - 3)^2$$

 $(4x)^2 - (2)(4x)(3) + 3^2$

24.
$$9x^2 - 6x + 1 =$$
 ______(3x)^2

$$A^2 - 2AB + B^2 = (A - B)^2$$

23.
$$16x^2 - 24x + 9 = (4x - 3)^2$$

 $(4x)^2 - (2)(4x)(3) + 3^2$

24.
$$9x^2 - 6x + 1 =$$

 $(3x)^2 -$

$$A^2 - 2AB + B^2 = (A - B)^2$$

23.
$$16x^2 - 24x + 9 = (4x - 3)^2$$

 $(4x)^2 - (2)(4x)(3) + 3^2$

24. $9x^2 - 6x + 1 =$ (3x)² - (2)(3x)(1)

$$A^2 - 2AB + B^2 = (A - B)^2$$

23.
$$16x^2 - 24x + 9 = (4x - 3)^2$$

 $(4x)^2 - (2)(4x)(3) + 3^2$

24. $9x^2 - 6x + 1 =$ (3x)² - (2)(3x)(1) +

$$A^2 - 2AB + B^2 = (A - B)^2$$

23.
$$16x^2 - 24x + 9 = (4x - 3)^2$$

 $(4x)^2 - (2)(4x)(3) + 3^2$

24. $9x^2 - 6x + 1 =$ (3x)² - (2)(3x)(1) + 1²

$$A^2 - 2AB + B^2 = (A - B)^2$$

23.
$$16x^2 - 24x + 9 = (4x - 3)^2$$

 $(4x)^2 - (2)(4x)(3) + 3^2$

24.
$$9x^2 - 6x + 1 = (3x)^2 - (2)(3x)(1) + 1^2$$

$$A^2 - 2AB + B^2 = (A - B)^2$$

23.
$$16x^2 - 24x + 9 = (4x - 3)^2$$

 $(4x)^2 - (2)(4x)(3) + 3^2$

24.
$$9x^2 - 6x + 1 = (3x - (3x)^2 - (2)(3x)(1) + 1^2)$$

$$A^2 - 2AB + B^2 = (A - B)^2$$

23.
$$16x^2 - 24x + 9 = (4x - 3)^2$$

 $(4x)^2 - (2)(4x)(3) + 3^2$

24.
$$9x^2 - 6x + 1 = (3x - 1)$$

 $(3x)^2 - (2)(3x)(1) + 1^2$

$$A^2 - 2AB + B^2 = (A - B)^2$$

23.
$$16x^2 - 24x + 9 = (4x - 3)^2$$

 $(4x)^2 - (2)(4x)(3) + 3^2$

24.
$$9x^2 - 6x + 1 = (3x - 1)^2$$

 $(3x)^2 - (2)(3x)(1) + 1^2$

$$A^2 - 2AB + B^2 = (A - B)^2$$

23.
$$16x^2 - 24x + 9 = (4x - 3)^2$$

 $(4x)^2 - (2)(4x)(3) + 3^2$

24.
$$9x^2 - 6x + 1 = (3x - 1)^2$$

 $(3x)^2 - (2)(3x)(1) + 1^2$

$$A^2 - 2AB + B^2 = (A - B)^2$$

Algebra I Class Worksheet #3 Unit 11

Factor each of the following.

23.
$$16x^2 - 24x + 9 = (4x - 3)^2$$

 $(4x)^2 - (2)(4x)(3) + 3^2$

Good luck on your homework !!

$$(3x)^2 - (2)(3x)(1) + 1^2$$

 $A^{2} + 2AB + B^{2} = (A + B)^{2}$ $A^{2} - 2AB + B^{2} = (A - B)^{2}$