## Algebra II

Lesson \#1 Unit 10
Class Worksheet \#1
For Worksheet \#1

This lesson will discuss integral exponents.

This lesson will discuss integral exponents. These are exponents that are integers.

This lesson will discuss integral exponents. These are exponents that are integers.

Consider these powers of 5.

This lesson will discuss integral exponents. These are exponents that are integers.

Consider these powers of 5.

$$
5^{2}=
$$

This lesson will discuss integral exponents. These are exponents that are integers.

Consider these powers of 5.

$$
5^{2}=(5)(5)
$$

This lesson will discuss integral exponents. These are exponents that are integers.

Consider these powers of 5.

$$
\stackrel{\downarrow}{5^{2}}=(5)(5)
$$

2 factors of 5

This lesson will discuss integral exponents. These are exponents that are integers.

Consider these powers of 5.

$$
5^{2}=(5)(5)=25
$$

This lesson will discuss integral exponents. These are exponents that are integers.

Consider these powers of 5.

$$
5^{2}=(5)(5)=25
$$

$5^{3}=$

This lesson will discuss integral exponents. These are exponents that are integers.

Consider these powers of 5.

$$
\begin{aligned}
& 5^{2}=(5)(5)=25 \\
& 5^{3}=(5)(5)(5)
\end{aligned}
$$

This lesson will discuss integral exponents. These are exponents that are integers.

Consider these powers of 5.

$$
\begin{gathered}
5^{2}=(5)(5)=25 \\
\downarrow \\
5^{3}=(5)(5)(5)
\end{gathered}
$$

3 factors of 5

This lesson will discuss integral exponents. These are exponents that are integers.

Consider these powers of 5.

$$
\begin{gathered}
5^{2}=(5)(5)=25 \\
5^{3}=(5)(5)(5)=125
\end{gathered}
$$

This lesson will discuss integral exponents. These are exponents that are integers.

Consider these powers of 5.

$$
\begin{aligned}
& 5^{2}=(5)(5)=25 \\
& 5^{3}=(5)(5)(5)=125 \\
& 5^{4}=
\end{aligned}
$$

This lesson will discuss integral exponents. These are exponents that are integers.

Consider these powers of 5.

$$
\begin{gathered}
5^{2}=(5)(5)=25 \\
5^{3}=(5)(5)(5)=125 \\
5^{4}=(5)(5)(5)(5)
\end{gathered}
$$

This lesson will discuss integral exponents. These are exponents that are integers.

Consider these powers of 5.

$$
\begin{aligned}
& 5^{2}=(5)(5)=25 \\
& 5^{3}=(5)(5)(5)=125 \\
& \downarrow \\
& 5^{4}=(5)(5)(5)(5) \\
& 4 \text { factors of } 5
\end{aligned}
$$

This lesson will discuss integral exponents. These are exponents that are integers.

Consider these powers of 5.

$$
\begin{gathered}
5^{2}=(5)(5)=25 \\
5^{3}=(5)(5)(5)=125 \\
5^{4}=(5)(5)(5)(5)=625
\end{gathered}
$$

This lesson will discuss integral exponents. These are exponents that are integers.

Consider these powers of 5.

$$
5^{2}=25 \quad 5^{3}=125 \quad 5^{4}=625
$$

This lesson will discuss integral exponents. These are exponents that are integers.

Consider these powers of 5.

$$
5^{2}=25 \quad 5^{3}=125 \quad 5^{4}=625
$$

Notice that when we add 1 to the exponent,

This lesson will discuss integral exponents. These are exponents that are integers.

Consider these powers of 5.


Notice that when we add 1 to the exponent,

## This lesson will discuss integral exponents.

 These are exponents that are integers.Consider these powers of 5.


Notice that when we add 1 to the exponent, the result is multiplied by 5 .

## This lesson will discuss integral exponents.

 These are exponents that are integers.Consider these powers of 5.

$$
5^{2}=25 \quad 5^{3}=125 \quad 5^{4}=625
$$

Notice that when we add 1 to the exponent, the result is multiplied by 5 .

This lesson will discuss integral exponents. These are exponents that are integers.

Consider these powers of 5.


Notice that when we add 1 to the exponent, the result is multiplied by 5 .

## This lesson will discuss integral exponents.

 These are exponents that are integers.Consider these powers of 5.

$$
5^{2}=25 \quad 5^{3}=125 \quad 5^{4}=625
$$

Notice that when we add 1 to the exponent, the result is multiplied by 5 .

This lesson will discuss integral exponents. These are exponents that are integers.

Consider these powers of 5.

$$
5^{2}=25 \quad 5^{3}=125 \quad 5^{4}=625
$$

Notice that when we add 1 to the exponent, the result is multiplied by 5 .

We could also say that when we subtract 1 from the exponent,

This lesson will discuss integral exponents. These are exponents that are integers.

Consider these powers of 5.

$$
5^{2}=25 \quad 5^{3}=125 \quad 5^{4}=625
$$

Notice that when we add 1 to the exponent, the result is multiplied by 5 .

We could also say that when we subtract 1 from the exponent,

This lesson will discuss integral exponents. These are exponents that are integers.

Consider these powers of 5.

$$
5^{2}=25 \quad 5^{3}=125 \quad 5^{4}=625
$$

Notice that when we add 1 to the exponent, the result is multiplied by 5 .

We could also say that when we subtract 1 from the exponent, the result is divided by 5 .

This lesson will discuss integral exponents. These are exponents that are integers.

Consider these powers of 5.


Notice that when we add 1 to the exponent, the result is multiplied by 5 .

We could also say that when we subtract 1 from the exponent, the result is divided by 5 .

This lesson will discuss integral exponents. These are exponents that are integers.

Consider these powers of 5.


Notice that when we add 1 to the exponent, the result is multiplied by 5 .

We could also say that when we subtract 1 from the exponent, the result is divided by 5 (or multiplied by $1 / 5$ ).

This lesson will discuss integral exponents. These are exponents that are integers.

Consider these powers of 5.

$$
5^{2}=25 \quad 5^{3}=125 \quad 5^{4}=625
$$

Notice that when we add 1 to the exponent, the result is multiplied by 5 .

We could also say that when we subtract 1 from the exponent, the result is divided by 5 (or multiplied by $1 / 5$ ).

This lesson will discuss integral exponents. These are exponents that are integers.

Consider these powers of 5.


Notice that when we add 1 to the exponent, the result is multiplied by 5 .

We could also say that when we subtract 1 from the exponent, the result is divided by 5 (or multiplied by $1 / 5$ ).

This lesson will discuss integral exponents. These are exponents that are integers.

Consider these powers of 5.


Notice that when we add 1 to the exponent, the result is multiplied by 5 .

We could also say that when we subtract 1 from the exponent, the result is divided by 5 (or multiplied by $1 / 5$ ).

This lesson will discuss integral exponents. These are exponents that are integers.

Consider these powers of 5.

$$
5^{2}=25 \quad 5^{3}=125 \quad 5^{4}=625
$$

Notice that when we add 1 to the exponent, the result is multiplied by 5 .

We could also say that when we subtract 1 from the exponent, the result is divided by 5 (or multiplied by $1 / 5$ ).

We will continue in this 'direction'.

## Integral Powers of 5

$$
5^{4}=625 \quad 5^{3}=125 \quad 5^{2}=25
$$

We could also say that when we subtract 1 from the exponent, the result is divided by 5 (or multiplied by $1 / 5$ ).

## Integral Powers of 5

$5^{4}=625 \quad 5^{3}=125 \quad 5^{2}=25 \quad 5^{1}=$

We could also say that when we subtract 1 from the exponent, the result is divided by 5 (or multiplied by $1 / 5$ ).

## Integral Powers of 5

$$
5^{4}=625 \quad 5^{3}=125 \quad 5^{2}=25 \quad 5^{1}=5
$$

We could also say that when we subtract 1 from the exponent, the result is divided by 5 (or multiplied by $1 / 5$ ).

## Integral Powers of 5

$$
5^{4}=625 \quad 5^{3}=125 \quad 5^{2}=25 \quad 5^{1}=5
$$

We could also say that when we subtract 1 from the exponent, the result is divided by 5 (or multiplied by $1 / 5$ ).

## Integral Powers of 5

$$
5^{4}=625 \quad 5^{3}=125 \quad 5^{2}=25 \quad 5^{1}=5 \quad 5^{0}=
$$

We could also say that when we subtract 1 from the exponent, the result is divided by 5 (or multiplied by 1/5).

## Integral Powers of 5

$$
5^{4}=625 \quad 5^{3}=125 \quad 5^{2}=25 \quad 5^{1}=5 \quad 5^{0}=1
$$

We could also say that when we subtract 1 from the exponent, the result is divided by 5 (or multiplied by $1 / 5$ ).

## Integral Powers of 5

$$
5^{4}=625 \quad 5^{3}=125 \quad 5^{2}=25 \quad 5^{1}=5 \quad 5^{0}=1
$$

We could also say that when we subtract 1 from the exponent, the result is divided by 5 (or multiplied by $1 / 5$ ).

## Integral Powers of 5



We could also say that when we subtract 1 from the exponent, the result is divided by 5 (or multiplied by 1/5).

## Integral Powers of 5



We could also say that when we subtract 1 from the exponent, the result is divided by 5 (or multiplied by $1 / 5$ ).

## Integral Powers of 5

$$
\begin{array}{ccc}
5^{4}=625 & 5^{3}=125 & 5^{2}=25 \\
& 5^{-1}=1 / 5
\end{array}
$$

We could also say that when we subtract 1 from the exponent, the result is divided by 5 (or multiplied by $1 / 5$ ).

## Integral Powers of 5

$$
\begin{array}{cccc}
5^{4}=625 & 5^{3}=125 & 5^{2}=25 & 5^{1}=5
\end{array} 5^{0}=1
$$

We could also say that when we subtract 1 from the exponent, the result is divided by 5 (or multiplied by $1 / 5$ ).

## Integral Powers of 5

$$
\begin{array}{cccc}
5^{4}=625 & 5^{3}=125 & 5^{2}=25 & 5^{1}=5 \\
\sqrt{\square} \\
5^{-2}=1 / 25 & 5^{-1}=1 / 5 & \\
&
\end{array}
$$

We could also say that when we subtract 1 from the exponent, the result is divided by 5 (or multiplied by $1 / 5$ ).

## Integral Powers of 5

$$
\begin{array}{llll}
5^{4}=625 & 5^{3}=125 & 5^{2}=25 & 5^{1}=5 \\
& 5^{-2}=1 / 25 & 5^{-1}=1 / 5
\end{array}
$$

We could also say that when we subtract 1 from the exponent, the result is divided by 5 (or multiplied by $1 / 5$ ).

## Integral Powers of 5

$$
\begin{array}{ccccc}
5^{4}=625 & 5^{3}=125 & 5^{2}=25 & 5^{1}=5 & 5^{0}=1 \\
\downarrow & & \\
5^{-3}= & 5^{-2}=1 / 25 & 5^{-1}=1 / 5 &
\end{array}
$$

We could also say that when we subtract 1 from the exponent, the result is divided by 5 (or multiplied by $1 / 5$ ).

## Integral Powers of 5



We could also say that when we subtract 1 from the exponent, the result is divided by 5 (or multiplied by $1 / 5$ ).

## Integral Powers of 5

$$
\begin{array}{lllll}
5^{4}=625 & 5^{3}=125 & 5^{2}=25 & 5^{1}=5 & 5^{0}=1 \\
& 5^{-3}=1 / 125 & 5^{-2}=1 / 25 & 5^{-1}=1 / 5
\end{array}
$$

We could also say that when we subtract 1 from the exponent, the result is divided by 5 (or multiplied by $1 / 5$ ).

## Integral Powers of 5

$$
\begin{array}{ccccc}
5^{4}=625 & 5^{3}=125 & 5^{2}=25 & 5^{1}=5 & 5^{0}=1 \\
\sqrt{4}=1 / 625 & 5^{-3}=1 / 125 & 5^{-2}=1 / 25 & 5^{-1}=1 / 5 &
\end{array}
$$

We could also say that when we subtract 1 from the exponent, the result is divided by 5 (or multiplied by $1 / 5$ ).

## Integral Powers of 5



We could also say that when we subtract 1 from the exponent, the result is divided by 5 (or multiplied by $1 / 5$ ).

## Integral Powers of 5

$$
\begin{array}{ccccc}
5^{4}=625 & 5^{3}=125 & 5^{2}=25 & 5^{1}=5 & 5^{0}=1 \\
5^{-4}=1 / 625 & 5^{-3}=1 / 125 & 5^{-2}=1 / 25 & 5^{-1}=1 / 5 &
\end{array}
$$

## Integral Powers of 5

$$
\begin{array}{ccccc}
5^{4}=625 & 5^{3}=125 & 5^{2}=25 & 5^{1}=5 & 5^{0}=1 \\
5^{-4}=1 / 625 & 5^{-3}=1 / 125 & 5^{-2}=1 / 25 & 5^{-1}=1 / 5 &
\end{array}
$$

In general, the following properties apply.

## Integral Powers of 5

$$
\begin{array}{ccccc}
5^{4}=625 & 5^{3}=125 & 5^{2}=25 & 5^{1}=5 & 5^{0}=1 \\
5^{-4}=1 / 625 & 5^{-3}=1 / 125 & 5^{-2}=1 / 25 & 5^{-1}=1 / 5 &
\end{array}
$$

In general, the following properties apply.
(1) If $\mathbf{b} \neq \mathbf{0}$,

## Integral Powers of 5

$$
\begin{array}{ccccc}
5^{4}=625 & 5^{3}=125 & 5^{2}=25 & 5^{1}=5 & 5^{0}=1 \\
5^{-4}=1 / 625 & 5^{-3}=1 / 125 & 5^{-2}=1 / 25 & 5^{-1}=1 / 5 &
\end{array}
$$

In general, the following properties apply.
(1) If $b \neq 0$, then $b^{0}=1$.

## Integral Powers of 5

$$
\begin{array}{ccccc}
5^{4}=625 & 5^{3}=125 & 5^{2}=25 & 5^{1}=5 & 5^{0}=1 \\
5^{-4}=1 / 625 & 5^{-3}=1 / 125 & 5^{-2}=1 / 25 & 5^{-1}=1 / 5 &
\end{array}
$$

In general, the following properties apply.
(1) If $b \neq 0$, then $b^{0}=1$.

## Integral Powers of 5

$$
\begin{array}{ccccc}
5^{4}=625 & 5^{3}=125 & 5^{2}=25 & 5^{1}=5 & 5^{0}=1 \\
5^{-4}=1 / 625 & 5^{-3}=1 / 125 & 5^{-2}=1 / 25 & 5^{-1}=1 / 5 &
\end{array}
$$

In general, the following properties apply.
(1) If $b \neq 0$, then $b^{0}=1 . \quad\left(0^{0}\right.$ is undefined. $)$

## Integral Powers of 5

$$
\begin{array}{ccccc}
5^{4}=625 & 5^{3}=125 & 5^{2}=25 & 5^{1}=5 & 5^{0}=1 \\
5^{-4}=1 / 625 & 5^{-3}=1 / 125 & 5^{-2}=1 / 25 & 5^{-1}=1 / 5 &
\end{array}
$$

In general, the following properties apply.
(1) If $b \neq 0$, then $b^{0}=1 . \quad\left(0^{0}\right.$ is undefined.)
(2) If $\mathbf{b} \neq \mathbf{0}$,

## Integral Powers of 5

$$
\begin{array}{ccccc}
5^{4}=625 & 5^{3}=125 & 5^{2}=25 & 5^{1}=5 & 5^{0}=1 \\
5^{-4}=1 / 625 & 5^{-3}=1 / 125 & 5^{-2}=1 / 25 & 5^{-1}=1 / 5 &
\end{array}
$$

In general, the following properties apply.
(1) If $b \neq 0$, then $b^{0}=1 . \quad\left(0^{0}\right.$ is undefined.)
(2) If $b \neq 0$, then $b^{-k}=1 / b^{k}$.

## Integral Powers of 5

$$
\begin{array}{ccccc}
5^{4}=625 & 5^{3}=125 & 5^{2}=25 & 5^{1}=5 & 5^{0}=1 \\
5^{-4}=1 / 625 & 5^{-3}=1 / 125 & 5^{-2}=1 / 25 & 5^{-1}=1 / 5 &
\end{array}
$$

In general, the following properties apply.
(1) If $b \neq 0$, then $b^{0}=1 . \quad\left(0^{0}\right.$ is undefined.)
(2) If $b \neq 0$, then $b^{-k}=1 / b^{k}$.

## Integral Powers of 5

$$
\begin{array}{cc|c|cc}
5^{4}=625 & 5^{3}=125 & 5^{2}=25 & 5^{1}=5 & 5^{0}=1 \\
5^{-4}=1 / 625 & 5^{-3}=1 / 125 & 5^{-2}=1 / 25 & 5^{-1}=1 / 5 &
\end{array}
$$

In general, the following properties apply.
(1) If $b \neq 0$, then $b^{0}=1 . \quad\left(0^{0}\right.$ is undefined.)
(2) If $b \neq 0$, then $b^{-k}=1 / b^{k}$.

## Integral Powers of 5

$$
\begin{array}{c|c|ccc}
5^{4}=625 & 5^{3}=125 & 5^{2}=25 & 5^{1}=5 & 5^{0}=1 \\
5^{-4}=1 / 625 & 5^{-3}=1 / 125 & 5^{-2}=1 / 25 & 5^{-1}=1 / 5 &
\end{array}
$$

In general, the following properties apply.
(1) If $b \neq 0$, then $b^{0}=1 . \quad\left(0^{0}\right.$ is undefined.)
(2) If $b \neq 0$, then $b^{-k}=1 / b^{k}$.

## Integral Powers of 5

$$
\begin{array}{ccccc}
5^{4}=625 & 5^{3}=125 & 5^{2}=25 & 5^{1}=5 & 5^{0}=1 \\
5^{-4}=1 / 625 & 5^{-3}=1 / 125 & 5^{-2}=1 / 25 & 5^{-1}=1 / 5 &
\end{array}
$$

In general, the following properties apply.
(1) If $b \neq 0$, then $b^{0}=1 . \quad\left(0^{0}\right.$ is undefined.)
(2) If $b \neq 0$, then $b^{-k}=1 / b^{k}$.

## Integral Powers of 5

$$
\begin{array}{ccccc}
5^{4}=625 & 5^{3}=125 & 5^{2}=25 & 5^{1}=5 & 5^{0}=1 \\
5^{-4}=1 / 625 & 5^{-3}=1 / 125 & 5^{-2}=1 / 25 & 5^{-1}=1 / 5 &
\end{array}
$$

In general, the following properties apply.
(1) If $b \neq 0$, then $b^{0}=1 . \quad\left(0^{0}\right.$ is undefined.)
(2) If $b \neq 0$, then $b^{-k}=1 / b^{k}$.

## Integral Powers of 5

$$
\begin{array}{ccccc}
5^{4}=625 & 5^{3}=125 & 5^{2}=25 & 5^{1}=5 & 5^{0}=1 \\
5^{-4}=1 / 625 & 5^{-3}=1 / 125 & 5^{-2}=1 / 25 & 5^{-1}=1 / 5 &
\end{array}
$$

In general, the following properties apply.
(1) If $b \neq 0$, then $b^{0}=1 . \quad\left(0^{0}\right.$ is undefined.)
(2) If $b \neq 0$, then $b^{-k}=1 / b^{k}$.

If $b$ is any non-zero real number,

## Integral Powers of 5

$$
\begin{array}{lllll}
5^{4}=625 & 5^{3}=125 & 5^{2}=25 & 5^{1}=5 & 5^{0}=1 \\
5^{-4}=1 / 625 & 5^{-3}=1 / 125 & 5^{-2}=1 / 25 & 5^{-1}=1 / 5 &
\end{array}
$$

In general, the following properties apply.
(1) If $b \neq 0$, then $b^{0}=1 . \quad\left(0^{0}\right.$ is undefined.)
(2) If $b \neq 0$, then $b^{-k}=1 / b^{k}$.

If $b$ is any non-zero real number, $b^{-k}$ is the reciprocal of $b^{k}$.

## Integral Powers of 5

$$
\begin{array}{lllll}
5^{4}=625 & 5^{3}=125 & 5^{2}=25 & 5^{1}=5 & 5^{0}=1 \\
5^{-4}=1 / 625 & 5^{-3}=1 / 125 & 5^{-2}=1 / 25 & 5^{-1}=1 / 5 &
\end{array}
$$

In general, the following properties apply.
(1) If $b \neq 0$, then $b^{0}=1 . \quad\left(0^{0}\right.$ is undefined.)
(2) If $b \neq 0$, then $b^{-k}=1 / b^{k}$.

If $b$ is any non-zero real number, $b^{-k}$ is the reciprocal of $b^{k}$.

Consider the following integral powers of $2 / 3$.

$$
\begin{array}{ll} 
& (2 / 3)^{0}= \\
(2 / 3)^{1}= & (2 / 3)^{-1}= \\
(2 / 3)^{2}= & (2 / 3)^{-2}= \\
(2 / 3)^{3}= & (2 / 3)^{-3}=
\end{array}
$$

Consider the following integral powers of $2 / 3$.

$$
\begin{array}{ll} 
& (2 / 3)^{0}= \\
(2 / 3)^{1}= & (2 / 3)^{-1}= \\
(2 / 3)^{2}= & (2 / 3)^{-2}= \\
(2 / 3)^{3}= & (2 / 3)^{-3}=
\end{array}
$$

Consider the following integral powers of $2 / 3$.

$$
(2 / 3)^{0}=
$$

Consider the following integral powers of $2 / 3$.

$$
\begin{gathered}
(2 / 3)^{0}= \\
\text { If } b \neq 0, \text { then } b^{0}=1 .
\end{gathered}
$$

Consider the following integral powers of $2 / 3$.

$$
\begin{gathered}
(2 / 3)^{0}=1 \\
\text { If } b \neq 0, \text { then } b^{0}=1 .
\end{gathered}
$$

Consider the following integral powers of $2 / 3$.

$$
(2 / 3)^{0}=1
$$

Consider the following integral powers of $2 / 3$.

$$
(2 / 3)^{0}=1
$$

$(2 / 3)^{1}=$
$(2 / 3)^{2}=$
$(2 / 3)^{3}=$

Consider the following integral powers of $2 / 3$.
$(2 / 3)^{0}=1$
$(2 / 3)^{1}=$
$(2 / 3)^{2}=$
$(2 / 3)^{3}=$

If the exponent is a positive integer,

Consider the following integral powers of $2 / 3$.

$$
(2 / 3)^{0}=1
$$

$$
\begin{aligned}
& (2 / 3)^{1}= \\
& (2 / 3)^{2}= \\
& (2 / 3)^{3}=
\end{aligned}
$$

If the exponent is a positive integer,

Consider the following integral powers of $2 / 3$.

$$
(2 / 3)^{0}=1
$$

$$
\begin{aligned}
& (2 / 3)^{1}= \\
& (2 / 3)^{2}= \\
& (2 / 3)^{3}=
\end{aligned}
$$

If the exponent is a positive integer, then raise the numerator and the denominator to that power.

Consider the following integral powers of $2 / 3$.

$$
(2 / 3)^{0}=1
$$

$(2 / 3)^{1}=$
$(2 / 3)^{2}=$
$(2 / 3)^{3}=$

If the exponent is a positive integer, then raise the numerator and the denominator to that power.

Consider the following integral powers of $2 / 3$.

$$
(2 / 3)^{0}=1
$$

$(2 / 3)^{1}=2^{1 / 3} 3^{1}$
$(2 / 3)^{2}=$
$(2 / 3)^{3}=$

If the exponent is a positive integer, then raise the numerator and the denominator to that power.

Consider the following integral powers of $2 / 3$.

$$
\begin{aligned}
& \quad(2 / 3)^{0}=1 \\
& (2 / 3)^{1}=2^{1 / 3} 3^{1}=2 / 3 \\
& (2 / 3)^{2}= \\
& (2 / 3)^{3}=
\end{aligned}
$$

If the exponent is a positive integer, then raise the numerator and the denominator to that power.

Consider the following integral powers of $2 / 3$.

$$
(2 / 3)^{0}=1
$$

$$
\begin{aligned}
& (2 / 3)^{1}=2^{1 / 3} 3^{1}=2 / 3 \\
& (2 / 3)^{2}= \\
& (2 / 3)^{3}=
\end{aligned}
$$

If the exponent is a positive integer, then raise the numerator and the denominator to that power.

Consider the following integral powers of $2 / 3$.

$$
(2 / 3)^{0}=1
$$

$$
\begin{aligned}
& (2 / 3)^{1}=2^{1} / 3^{1}=2 / 3 \\
& (2 / 3)^{2}=2^{2} / 3^{2} \\
& (2 / 3)^{3}=
\end{aligned}
$$

If the exponent is a positive integer, then raise the numerator and the denominator to that power.

Consider the following integral powers of $2 / 3$.

$$
(2 / 3)^{0}=1
$$

$$
\begin{aligned}
& (2 / 3)^{1}=2^{1} / 3^{1}=2 / 3 \\
& (2 / 3)^{2}=2^{2} / 3^{2}=4 / 9 \\
& (2 / 3)^{3}=
\end{aligned}
$$

If the exponent is a positive integer, then raise the numerator and the denominator to that power.

Consider the following integral powers of $2 / 3$.

$$
(2 / 3)^{0}=1
$$

$$
\begin{aligned}
& (2 / 3)^{1}=2^{1} / 3^{1}=2 / 3 \\
& (2 / 3)^{2}=2^{2} / 3^{2}=4 / 9 \\
& (2 / 3)^{3}=
\end{aligned}
$$

If the exponent is a positive integer, then raise the numerator and the denominator to that power.

Consider the following integral powers of $2 / 3$.

$$
(2 / 3)^{0}=1
$$

$$
\begin{aligned}
& (2 / 3)^{1}=2^{1} / 3^{1}=2 / 3 \\
& (2 / 3)^{2}=2^{2} / 3^{2}=4 / 9 \\
& (2 / 3)^{3}=2^{3} / 3^{3}
\end{aligned}
$$

If the exponent is a positive integer, then raise the numerator and the denominator to that power.

Consider the following integral powers of $2 / 3$.

$$
(2 / 3)^{0}=1
$$

$$
\begin{aligned}
& (2 / 3)^{1}=2^{1} / 3^{1}=2 / 3 \\
& (2 / 3)^{2}=2^{2} / 3^{2}=4 / 9 \\
& (2 / 3)^{3}=2^{3} / 3^{3}=8 / 27
\end{aligned}
$$

If the exponent is a positive integer, then raise the numerator and the denominator to that power.

Consider the following integral powers of $2 / 3$.

$$
(2 / 3)^{0}=1
$$

$$
\begin{aligned}
& (2 / 3)^{1}=2^{1} / 3^{1}=2 / 3 \\
& (2 / 3)^{2}=2^{2} / 3^{2}=4 / 9 \\
& (2 / 3)^{3}=2^{3} / 3^{3}=8 / 27
\end{aligned}
$$

If the exponent is a positive integer, then raise the numerator and the denominator to that power.

Consider the following integral powers of $2 / 3$.

$$
\begin{gathered}
\quad(2 / 3)^{0}=1 \\
(2 / 3)^{1}=2^{1 / 3} 3^{1}=2 / 3 \\
(2 / 3)^{2}=2^{2} / 3^{2}=4 / 9 \\
(2 / 3)^{3}=2^{3} / 3^{3}=8 / 27 \\
(x / y)^{n}=x^{n} / y^{n}
\end{gathered}
$$

If the exponent is a positive integer, then raise the numerator and the denominator to that power.

Consider the following integral powers of $2 / 3$.

$$
(2 / 3)^{0}=1
$$

$$
(2 / 3)^{1}=2^{1 / 3} 3^{1}=2 / 3
$$

$$
(2 / 3)^{2}=2^{2} / 3^{2}=4 / 9
$$

$$
(2 / 3)^{3}=2^{3} / 3^{3}=8 / 27
$$

Consider the following integral powers of $2 / 3$.

\[

\]

Consider the following integral powers of $2 / 3$.

\[

\]

If the exponent is a negative integer,

Consider the following integral powers of $2 / 3$.

\[

\]

If the exponent is a negative integer,

Consider the following integral powers of $2 / 3$.

\[

\]

If the exponent is a negative integer, take the reciprocal of the base, and make the exponent positive.

Consider the following integral powers of $2 / 3$.

\[

\]

If the exponent is a negative integer, take the reciprocal of the base, and make the exponent positive.

Consider the following integral powers of $2 / 3$.

\[

\]

If the exponent is a negative integer, take the reciprocal of the base, and make the exponent positive.

Consider the following integral powers of $2 / 3$.

\[

\]

If the exponent is a negative integer, take the reciprocal of the base, and make the exponent positive.

Consider the following integral powers of $2 / 3$.

\[

\]

If the exponent is a negative integer, take the reciprocal of the base, and make the exponent positive.

Consider the following integral powers of $2 / 3$.

\[

\]

If the exponent is a negative integer, take the reciprocal of the base, and make the exponent positive.

Consider the following integral powers of $2 / 3$.

\[

\]

If the exponent is a negative integer, take the reciprocal of the base, and make the exponent positive.

Consider the following integral powers of $2 / 3$.

\[

\]

If the exponent is a negative integer, take the reciprocal of the base, and make the exponent positive.

Consider the following integral powers of $2 / 3$.

\[

\]

If the exponent is a negative integer, take the reciprocal of the base, and make the exponent positive. Then, raise the numerator and the denominator to that power.

Consider the following integral powers of $2 / 3$.

\[

\]

If the exponent is a negative integer, take the reciprocal of the base, and make the exponent positive. Then, raise the numerator and the denominator to that power.

Consider the following integral powers of $2 / 3$.

\[

\]

If the exponent is a negative integer, take the reciprocal of the base, and make the exponent positive. Then, raise the numerator and the denominator to that power.

Consider the following integral powers of $2 / 3$.

\[

\]

If the exponent is a negative integer, take the reciprocal of the base, and make the exponent positive. Then, raise the numerator and the denominator to that power.

Consider the following integral powers of $2 / 3$.

\[

\]

If the exponent is a negative integer, take the reciprocal of the base, and make the exponent positive. Then, raise the numerator and the denominator to that power.

Consider the following integral powers of $2 / 3$.

\[

\]

If the exponent is a negative integer, take the reciprocal of the base, and make the exponent positive. Then, raise the numerator and the denominator to that power.

Consider the following integral powers of $2 / 3$.

\[

\]

If the exponent is a negative integer, take the reciprocal of the base, and make the exponent positive. Then, raise the numerator and the denominator to that power.

Consider the following integral powers of $2 / 3$.

\[

\]

If the exponent is a negative integer, take the reciprocal of the base, and make the exponent positive. Then, raise the numerator and the denominator to that power.

Consider the following integral powers of $2 / 3$.

\[

\]

If the exponent is a negative integer, take the reciprocal of the base, and make the exponent positive. Then, raise the numerator and the denominator to that power.

Consider the following integral powers of $2 / 3$.

\[

\]

If the exponent is a negative integer, take the reciprocal of the base, and make the exponent positive. Then, raise the numerator and the denominator to that power.

Consider the following integral powers of $2 / 3$.

\[

\]

If the exponent is a negative integer, take the reciprocal of the base, and make the exponent positive. Then, raise the numerator and the denominator to that power.

Consider the following integral powers of $2 / 3$.

\[

\]

If the exponent is a negative integer, take the reciprocal of the base, and make the exponent positive. Then, raise the numerator and the denominator to that power.

Consider the following integral powers of $2 / 3$.

\[

\]

If the exponent is a negative integer, take the reciprocal of the base, and make the exponent positive. Then, raise the numerator and the denominator to that power.

Consider the following integral powers of $2 / 3$.

\[

\]

If the exponent is a negative integer, take the reciprocal of the base, and make the exponent positive. Then, raise the numerator and the denominator to that power.

Consider the following integral powers of $2 / 3$.

$$
\quad \begin{aligned}
& \text { If the exponent is a negative integer, } \\
& \begin{array}{l}
\text { take the reciprocal of the base, and } \\
\text { make the exponent positive. Then, } \\
\text { raise the numerator and the } \\
\text { denominator to that power. }
\end{array}
\end{aligned}
$$

Consider the following integral powers of $2 / 3$.

\[

\]

Consider the following integral powers of $2 / 3$.

\[

\]

If $b$ is any non-zero real number, $b^{-k}$ is the reciprocal of $b^{k}$.

Consider the following integral powers of $2 / 3$.

\[

\]

If $b$ is any non-zero real number, $b^{-k}$ is the reciprocal of $b^{k}$.

Consider the following integral powers of $2 / 3$.

\[

\]

If $b$ is any non-zero real number, $b^{-k}$ is the reciprocal of $b^{k}$.

Consider the following integral powers of $2 / 3$.

\[

\]

If $b$ is any non-zero real number, $b^{-k}$ is the reciprocal of $b^{k}$.

Consider the following integral powers of $2 / 3$.

\[

\]

If $b$ is any non-zero real number, $b^{-k}$ is the reciprocal of $b^{\mathbf{k}}$.

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.

1. $\mathbf{5}^{3}=$
2. $3^{5}=$
3. $(-5)^{3}=$
4. $(-5)^{4}=$
5. $2^{0}=$
6. $(-3)^{0}=$

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.

1. $\mathbf{5}^{3}=$
2. $3^{5}=$
3. $(-5)^{3}=$
4. $(-5)^{4}=$
5. $\mathbf{2}^{0}=$
6. $(-3)^{0}=$

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.

1. $5^{3}=$
2. $3^{5}=$
3. $(-5)^{3}=$
4. $(-5)^{4}=$
5. $\mathbf{2}^{0}=$
6. $(-3)^{0}=$

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.

1. $5^{3}=$
$=(5)(5)(5)$
2. $(-5)^{4}=$
3. $\mathbf{2}^{0}=$
4. $(-3)^{0}=$

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.

1. $\mathbf{5}^{3}=125$
2. $3^{5}=$
3. $(-5)^{3}=$
$=(5)(5)(5)$
4. $(-5)^{4}=$
5. $2^{0}=$
6. $(-3)^{0}=$

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.

1. $\mathbf{5}^{3}=125$
2. $3^{5}=$
3. $(-5)^{3}=$
$=(5)(5)(5)$
4. $(-5)^{4}=$
5. $2^{0}=$
6. $(-3)^{0}=$

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.

1. $\mathbf{5}^{3}=125$
$=(5)(5)(5)$
2. $3^{5}=$
3. $(-5)^{3}=$
$=(3)(3)(3)(3)(3)$
4. $(-5)^{4}=$
5. $\mathbf{2}^{0}=$
6. $(-3)^{0}=$

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.

1. $\mathbf{5}^{3}=125$
2. $3^{5}=243$
3. $(-5)^{3}=$
$=(5)(5)(5) \quad=(3)(3)(3)(3)(3)$
4. $(-5)^{4}=$
5. $\mathbf{2}^{0}=$
6. $(-3)^{0}=$

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.

1. $\mathbf{5}^{3}=125$
2. $3^{5}=243$
3. $(-5)^{3}=$
$=(5)(5)(5) \quad=(3)(3)(3)(3)(3)$
4. $(-5)^{4}=$
5. $2^{0}=$
6. $(-3)^{0}=$

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.

1. $\mathbf{5}^{3}=125$
2. $3^{5}=243$
$=(5)(5)(5)$
$=(3)(3)(3)(3)(3)$
3. $(-5)^{3}=$
$=(-5)(-5)(-5)$
4. $(-5)^{4}=$
5. $\mathbf{2}^{0}=$
6. $(-3)^{0}=$

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.

1. $\mathbf{5}^{3}=125$
2. $3^{5}=243$
3. $(-5)^{3}=-125$
$=(5)(5)(5)$
$=(3)(3)(3)(3)(3)$
$=(-5)(-5)(-5)$
4. $(-5)^{4}=$
5. $2^{0}=$
6. $(-3)^{0}=$

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.

1. $\mathbf{5}^{3}=125$
2. $3^{5}=243$
3. $(-5)^{3}=-125$
$=(5)(5)(5)$
$=(3)(3)(3)(3)(3)$
$=(-5)(-5)(-5)$
4. $(-5)^{4}=$
5. $\mathbf{2}^{0}=$
6. $(-3)^{0}=$

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.

$$
\begin{array}{lll}
\text { 1. } 5^{3}=125 & \text { 2. } 3^{5}=243 & \text { 3. }(-5)^{3}=-125 \\
=(5)(5)(5) & =(3)(3)(3)(3)(3) & =(-5)(-5)(-5)
\end{array}
$$

4. $(-5)^{4}=$
5. $\mathbf{2}^{\mathbf{0}}=$
6. $(-3)^{0}=$

$$
=(-5)(-5)(-5)(-5)
$$

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.

$$
\begin{array}{lll}
\text { 1. } 5^{3}=125 & \text { 2. } 3^{5}=243 & \text { 3. }(-5)^{3}=-125 \\
=(5)(5)(5) & =(3)(3)(3)(3)(3) & =(-5)(-5)(-5)
\end{array}
$$

$$
\begin{array}{lll}
\text { 4. }(-5)^{4}=625 & \text { 5. } 2^{0}= & \text { 6. }(-3)^{0}= \\
=(-5)(-5)(-5)(-5) & &
\end{array}
$$

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.

1. $\mathbf{5}^{3}=125$
2. $3^{5}=243$
3. $(-5)^{3}=-125$
$=(5)(5)(5)$
$=(3)(3)(3)(3)(3)$
$=(-5)(-5)(-5)$

$$
\begin{aligned}
& \text { 4. }(-5)^{4}=625 \text { 5. } 2^{0}= \\
&=(-5)(-5)(-5)(-5)
\end{aligned}
$$

6. $(-3)^{0}=$

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.

$$
\begin{array}{lll}
\text { 1. } 5^{3}=125 & \text { 2. } 3^{5}=243 & \text { 3. }(-5)^{3}=-125 \\
=(5)(5)(5) & =(3)(3)(3)(3)(3) & =(-5)(-5)(-5)
\end{array}
$$

$$
\begin{aligned}
\text { 4. } \quad(-5)^{4}=625 & \text { 5. } 2^{0}= \\
=(-5)(-5)(-5)(-5) & \text { If } b \neq 0, \text { then } b^{0}=1 .
\end{aligned}
$$

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.

1. $\mathbf{5}^{3}=125$
2. $3^{5}=243$
3. $(-5)^{3}=-125$
$=(5)(5)(5)$
$=(3)(3)(3)(3)(3)$
$=(-5)(-5)(-5)$
4. $(-5)^{4}=625$
5. $2^{0}=1$
6. $(-3)^{0}=$
$=(-5)(-5)(-5)(-5) \quad$ If $b \neq 0$, then $b^{0}=1$.

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.

1. $\mathbf{5}^{3}=125$
2. $3^{5}=243$
3. $(-5)^{3}=-125$
$=(5)(5)(5)$
$=(3)(3)(3)(3)(3) \quad=(-5)(-5)(-5)$
4. $(-5)^{4}=625 \quad$ 5. $2^{0}=1$
5. $(-3)^{0}=$
$=(-5)(-5)(-5)(-5) \quad$ If $b \neq 0$, then $b^{0}=1$.

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.

$$
\begin{array}{lll}
\text { 1. } 5^{3}=125 & \text { 2. } 3^{5}=243 & \text { 3. }(-5)^{3}=-125 \\
=(5)(5)(5) & =(3)(3)(3)(3)(3) & =(-5)(-5)(-5)
\end{array}
$$

4. $(-5)^{4}=625$
5. $2^{0}=1$
6. $(-3)^{0}=$
$=(-5)(-5)(-5)(-5)$
If $b \neq 0$, then $b^{0}=1 . \quad$ If $b \neq 0$, then $b^{0}=1$.

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.

$$
\begin{aligned}
& \text { 1. } \mathbf{5}^{3}=125 \\
& \text { 2. } 3^{5}=243 \\
& \text { 3. }(-5)^{3}=-125 \\
& =(5)(5)(5) \\
& =(3)(3)(3)(3)(3)=(-5)(-5)(-5) \\
& \text { 4. }(-5)^{4}=625 \\
& \text { 5. } 2^{0}=1 \\
& \text { 6. }(-3)^{0}=1 \\
& =(-5)(-5)(-5)(-5) \\
& \text { If } b \neq 0 \text {, then } b^{0}=1 . \quad \text { If } b \neq 0 \text {, then } b^{0}=1 .
\end{aligned}
$$

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.

$$
\begin{array}{lll}
\begin{array}{l}
\text { 1. } 5^{3}=125 \\
=(5)(5)(5)
\end{array} & \begin{array}{l}
\text { 2. } 3^{5}=243 \\
=(3)(3)(3)(3)(3)
\end{array} & \begin{array}{l}
\text { 3. }(-5)^{3}=-125 \\
=(-5)(-5)(-5)
\end{array} \\
\begin{array}{ll}
\text { 4. } \quad(-5)^{4}=625 & \text { 5. } 2^{0}=1
\end{array} & \text { 6. }(-3)^{0}=1 \\
=(-5)(-5)(-5)(-5) & \text { If } b \neq 0, \text { then } b^{0}=1 . & \text { If } b \neq 0, \text { then } b^{0}=1 .
\end{array}
$$

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.

$$
\begin{array}{lll}
\begin{array}{l}
\text { 1. } 5^{3}=125 \\
=(5)(5)(5)
\end{array} & \begin{array}{l}
\text { 2. } 3^{5}=243 \\
=(3)(3)(3)(3)(3)
\end{array} & \begin{array}{l}
\text { 3. }(-5)^{3}=-125 \\
=(-5)(-5)(-5)
\end{array} \\
\begin{array}{ll}
\text { 4. } \quad(-5)^{4}=625 & \text { 5. } 2^{0}=1
\end{array} & \text { 6. }(-3)^{0}=1 \\
=(-5)(-5)(-5)(-5) & \text { If } b \neq 0, \text { then } b^{0}=1 . & \text { If } b \neq 0, \text { then } b^{0}=1 .
\end{array}
$$

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.
7. $(5)^{-2}=$
8. $(-5)^{-2}=$
9. $7^{-3}=$
10. $(-7)^{-3}=$
11. $\mathbf{8}^{1}=$
12. $\mathbf{1}^{8}=$

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.
7. $(5)^{-2}=$
8. $(-5)^{-2}=$
9. $7^{-3}=$
10. $(-7)^{-3}=$
11. $\mathbf{8}^{\mathbf{1}}=$
12. $\mathbf{1}^{8}=$

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.
7. $(5)^{-2}=$
8. $(-5)^{-2}=$
9. $7^{-3}=$
10. $(-7)^{-3}=$
11. $\mathbf{8}^{\mathbf{1}}=$
12. $\mathbf{1}^{8}=$

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.
7. $(5)^{-2}=$
8. $(-5)^{-2}=$
9. $7^{-3}=$

If $\mathbf{b} \neq \mathbf{0}$, then $\mathbf{b}^{-\mathbf{k}}=\mathbf{1} / \mathbf{b}^{\mathbf{k}}$.
10. $(-7)^{-3}=$
11. $\mathbf{8}^{\mathbf{1}}=$
12. $\mathbf{1}^{8}=$

## Algebra II Class Worksheet \#1 Unit 10

## Evaluate each of the following.

7. $(5)^{-2}=$
8. $(-5)^{-2}=$
9. $7^{-3}=$ $=1 / \mathbf{5}^{2}$

If $b \neq 0$, then $b^{-k}=\mathbf{1} / \mathbf{b}^{\mathbf{k}}$.
10. $(-7)^{-3}=$
11. $\mathbf{8}^{\mathbf{1}}=$
12. $\mathbf{1}^{8}=$

## Algebra II Class Worksheet \#1 Unit 10

## Evaluate each of the following.

7. $(5)^{-2}=1 / 25$
8. $(-5)^{-2}=$
9. $7^{-3}=$ $=1 / 5^{2}$

If $b \neq 0$, then $b^{-k}=\mathbf{1} / \mathbf{b}^{k}$.
10. $(-7)^{-3}=$
11. $\mathbf{8}^{\mathbf{1}}=$
12. $\mathbf{1}^{8}=$

## Algebra II Class Worksheet \#1 Unit 10

## Evaluate each of the following.

7. $(5)^{-2}=1 / 25$
8. $(-5)^{-2}=$
9. $7^{-3}=$ $=1 / 5^{2}$

If $b \neq 0$, then $b^{-k}=\mathbf{1} / \mathbf{b}^{\mathbf{k}}$.
10. $(-7)^{-3}=$
11. $\mathbf{8}^{\mathbf{1}}=$
12. $\mathbf{1}^{8}=$

## Algebra II Class Worksheet \#1 Unit 10

## Evaluate each of the following.

7. $(5)^{-2}=1 / 25$
8. $(-5)^{-2}=$
9. $7^{-3}=$ $=1 / 5^{2}$

If $b \neq 0$, then $b^{-k}=1 / b^{k} . \quad$ If $b \neq 0$, then $b^{-k}=1 / b^{k}$.
10. $(-7)^{-3}=$
11. $\mathbf{8}^{\mathbf{1}}=$
12. $\mathbf{1}^{8}=$

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.
7. $(5)^{-2}=1 / 25$
8. $(-5)^{-2}=$
9. $7^{-3}=$
$=1 / 5^{2}$

$$
=1 /(-5)^{2}
$$

If $b \neq 0$, then $b^{-k}=1 / b^{k} . \quad$ If $b \neq 0$, then $b^{-k}=1 / b^{k}$.
10. $(-7)^{-3}=$
11. $\mathbf{8}^{\mathbf{1}}=$
12. $\mathbf{1}^{8}=$

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.
7. $(5)^{-2}=1 / 25$
8. $(-5)^{-2}=1 / 25$
9. $7^{-3}=$
$=1 / 5^{2}$
$=1 /(-5)^{2}$

If $b \neq 0$, then $b^{-k}=1 / b^{k} . \quad$ If $b \neq 0$, then $b^{-k}=1 / b^{k}$.
10. $(-7)^{-3}=$
11. $\mathbf{8}^{\mathbf{1}}=$
12. $\mathbf{1}^{8}=$

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.
7. $(5)^{-2}=1 / 25$
8. $(-5)^{-2}=1 / 25$
9. $7^{-3}=$
$=1 / 5^{2}$ $=1 /(-5)^{2}$

If $b \neq 0$, then $b^{-k}=1 / b^{k} . \quad$ If $b \neq 0$, then $b^{-k}=1 / b^{k}$.
10. $(-7)^{-3}=$
11. $\mathbf{8}^{\mathbf{1}}=$
12. $1^{8}=$

## Algebra II Class Worksheet \#1 Unit 10

## Evaluate each of the following.

7. $(5)^{-2}=1 / 25$
8. $(-5)^{-2}=1 / 25$
9. $7^{-3}=$
$=1 / 5^{2}$
$=1 /(-5)^{2}$

If $b \neq 0$, then $b^{-k}=1 / \mathbf{b}^{k} . \quad$ If $\mathbf{b} \neq 0$, then $b^{-k}=1 / \mathbf{b}^{k} . \quad$ If $\mathbf{b} \neq 0$, then $b^{-k}=1 / \mathbf{b}^{k}$.
10. $(-7)^{-3}=$
11. $\mathbf{8}^{\mathbf{1}}=$
12. $1^{8}=$

## Algebra II Class Worksheet \#1 Unit 10

## Evaluate each of the following.

7. $(5)^{-2}=1 / 25$
8. $(-5)^{-2}=1 / 25$
9. $7^{-3}=$
$=1 / 5^{2}$
$=1 /(-5)^{2}$
$=1 / 7^{3}$

If $b \neq 0$, then $b^{-k}=1 / \mathbf{b}^{k} . \quad$ If $\mathbf{b} \neq 0$, then $b^{-k}=1 / \mathbf{b}^{k} . \quad$ If $\mathbf{b} \neq 0$, then $b^{-k}=1 / \mathbf{b}^{k}$.
10. $(-7)^{-3}=$
11. $\mathbf{8}^{\mathbf{1}}=$
12. $\mathbf{1}^{8}=$

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.
7. $(5)^{-2}=1 / 25$
8. $(-5)^{-2}=1 / 25$
9. $7^{-3}=1 / 343$
$=1 / 5^{2}$
$=1 /(-5)^{2}$
$=1 / 7^{3}$

If $b \neq 0$, then $b^{-k}=1 / b^{k} . \quad$ If $b \neq 0$, then $b^{-k}=1 / b^{k} . \quad$ If $b \neq 0$, then $b^{-k}=1 / \mathbf{b}^{k}$.
10. $(-7)^{-3}=$
11. $\mathbf{8}^{\mathbf{1}}=$
12. $\mathbf{1}^{8}=$

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.
7. $(5)^{-2}=1 / 25$
8. $(-5)^{-2}=1 / 25$
$=1 /(-5)^{2}$
9. $7^{-3}=1 / 343$
$=1 / 5^{2}$
$=1 / 7^{3}$

If $b \neq 0$, then $b^{-k}=1 / \mathbf{b}^{k} . \quad$ If $b \neq 0$, then $b^{-k}=1 / b^{k} . \quad$ If $b \neq 0$, then $b^{-k}=1 / \mathbf{b}^{k}$.
10. $(-7)^{-3}=$
11. $\mathbf{8}^{\mathbf{1}}=$
12. $\mathbf{1}^{8}=$

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.
7. $(5)^{-2}=1 / 25$
8. $(-5)^{-2}=1 / 25$
9. $7^{-3}=1 / 343$
$=1 / 5^{2}$
$=1 /(-5)^{2}$
$=1 / 7^{3}$

If $b \neq 0$, then $b^{-k}=1 / b^{k} . \quad$ If $b \neq 0$, then $b^{-k}=1 / b^{k} . \quad$ If $b \neq 0$, then $b^{-k}=1 / b^{k}$.
10. $(-7)^{-3}=$
11. $\mathbf{8}^{\mathbf{1}}=$
12. $\mathbf{1}^{8}=$

If $b \neq 0$, then $b^{-k}=\mathbf{1} / \mathbf{b}^{k}$.

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.
7. $(5)^{-2}=1 / 25$
8. $(-5)^{-2}=1 / 25$
9. $7^{-3}=1 / 343$
$=1 / 5^{2}$
$=1 /(-5)^{2}$
$=1 / 7^{3}$

If $b \neq 0$, then $b^{-k}=1 / b^{k} . \quad$ If $b \neq 0$, then $b^{-k}=1 / b^{k} . \quad$ If $b \neq 0$, then $b^{-k}=1 / b^{k}$.
10. $(-7)^{-3}=$
11. $\mathbf{8}^{1}=$
12. $\mathbf{1}^{8}=$

$$
=1 /(-7)^{3}
$$

If $b \neq 0$, then $b^{-k}=\mathbf{1} / \mathbf{b}^{k}$.

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.
7. $(5)^{-2}=1 / 25$
8. $(-5)^{-2}=1 / 25$
9. $7^{-3}=1 / 343$
$=1 / 5^{2}$
$=1 /(-5)^{2}$
$=1 / 7^{3}$

If $b \neq 0$, then $b^{-k}=1 / b^{k} . \quad$ If $b \neq 0$, then $b^{-k}=1 / b^{k} . \quad$ If $b \neq 0$, then $b^{-k}=1 / b^{k}$.
10. $(-7)^{-3}=$
11. $\mathbf{8}^{\mathbf{1}}=$
12. $\mathbf{1}^{8}=$

$$
\begin{aligned}
& =1 /(-7)^{3}= \\
& =1 /(-343)
\end{aligned}
$$

If $b \neq 0$, then $b^{-k}=1 / b^{k}$.

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.
7. $(5)^{-2}=1 / 25$
8. $(-5)^{-2}=1 / 25$
9. $7^{-3}=1 / 343$
$=1 / 5^{2}$
$=1 /(-5)^{2}$
$=1 / 7^{3}$

If $b \neq 0$, then $b^{-k}=1 / b^{k} . \quad$ If $b \neq 0$, then $b^{-k}=1 / b^{k} . \quad$ If $b \neq 0$, then $b^{-k}=1 / b^{k}$.
10. $(-7)^{-3}=-1 / 343 \quad$ 11. $\quad 8^{1}=$
12. $\mathbf{1}^{8}=$

$$
\begin{aligned}
& =1 /(-7)^{3}= \\
& =1 /(-343)
\end{aligned}
$$

If $b \neq 0$, then $b^{-k}=1 / b^{k}$.

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.
7. $(5)^{-2}=1 / 25$
8. $(-5)^{-2}=1 / 25$
9. $7^{-3}=1 / 343$
$=1 / 5^{2}$
$=1 /(-5)^{2}$
$=1 / 7^{3}$

If $b \neq 0$, then $b^{-k}=1 / b^{k} . \quad$ If $b \neq 0$, then $b^{-k}=1 / b^{k} . \quad$ If $b \neq 0$, then $b^{-k}=1 / b^{k}$.
10. $(-7)^{-3}=-1 / 343 \quad$ 11. $\quad 8^{1}=$
12. $\mathbf{1}^{8}=$

$$
\begin{aligned}
& =1 /(-7)^{3}= \\
& =1 /(-343)
\end{aligned}
$$

If $b \neq 0$, then $b^{-k}=\mathbf{1} / \mathbf{b}^{k}$.

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.
7. $(5)^{-2}=1 / 25$
8. $(-5)^{-2}=1 / 25$
9. $7^{-3}=1 / 343$
$=1 / 5^{2}$
$=1 /(-5)^{2}$
$=1 / 7^{3}$

If $b \neq 0$, then $b^{-k}=1 / b^{k} . \quad$ If $b \neq 0$, then $b^{-k}=1 / b^{k} . \quad$ If $b \neq 0$, then $b^{-k}=1 / b^{k}$.
10. $(-7)^{-3}=-1 / 343 \quad$ 11. $\quad 8^{1}=$
12. $\mathbf{1}^{8}=$

$$
\begin{aligned}
& =\mathbf{1} /(-7)^{3}= \\
& =\mathbf{1} /(-343)
\end{aligned} \quad b^{1}=b
$$

If $b \neq 0$, then $b^{-k}=1 / b^{k}$.

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.
7. $(5)^{-2}=1 / 25$
8. $(-5)^{-2}=1 / 25$
9. $7^{-3}=1 / 343$
$=1 / 5^{2}$
$=1 /(-5)^{2}$
$=1 / 7^{3}$

If $b \neq 0$, then $b^{-k}=1 / b^{k} . \quad$ If $b \neq 0$, then $b^{-k}=1 / b^{k} . \quad$ If $b \neq 0$, then $b^{-k}=1 / b^{k}$.
10. $(-7)^{-3}=-1 / 343 \quad$ 11. $\quad 8^{1}=8$
12. $\mathbf{1}^{8}=$

$$
\begin{aligned}
& =\mathbf{1} /(-7)^{3}= \\
& =\mathbf{1} /(-343)
\end{aligned} \quad b^{1}=b
$$

If $b \neq 0$, then $b^{-k}=1 / b^{k}$.

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.
7. $(5)^{-2}=1 / 25$
8. $(-5)^{-2}=1 / 25$
9. $7^{-3}=1 / 343$
$=1 / 5^{2}$
$=1 /(-5)^{2}$
$=1 / 7^{3}$

If $b \neq 0$, then $b^{-k}=1 / b^{k} . \quad$ If $b \neq 0$, then $b^{-k}=1 / b^{k} . \quad$ If $b \neq 0$, then $b^{-k}=1 / b^{k}$.
10. $(-7)^{-3}=-1 / 343 \quad$ 11. $\quad 8^{1}=8$
12. $\mathbf{1}^{8}=$

$$
\begin{aligned}
& =\mathbf{1} /(-7)^{3}= \\
& =1 /(-343)
\end{aligned} \quad b^{1}=b
$$

If $b \neq 0$, then $b^{-k}=1 / b^{k}$.

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.
7. $(5)^{-2}=1 / 25$
8. $(-5)^{-2}=1 / 25$
9. $7^{-3}=1 / 343$
$=1 / 5^{2}$
$=1 /(-5)^{2}$
$=1 / 7^{3}$

If $b \neq 0$, then $b^{-k}=1 / b^{k} . \quad$ If $b \neq 0$, then $b^{-k}=1 / b^{k} . \quad$ If $b \neq 0$, then $b^{-k}=1 / b^{k}$.
10. $(-7)^{-3}=-1 / 343 \quad$ 11. $\quad 8^{1}=8$
12. $\mathbf{1}^{8}=1$

$$
\begin{aligned}
& =\mathbf{1} /(-7)^{3}= \\
& =1 /(-343)
\end{aligned} \quad b^{1}=b
$$

If $b \neq 0$, then $b^{-k}=1 / b^{k}$.

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.
7. $(5)^{-2}=1 / 25$
8. $(-5)^{-2}=1 / 25$
9. $7^{-3}=1 / 343$
$=1 / 5^{2}$
$=1 /(-5)^{2}$
$=1 / 7^{3}$

If $b \neq 0$, then $b^{-k}=1 / b^{k} . \quad$ If $b \neq 0$, then $b^{-k}=1 / b^{k} . \quad$ If $b \neq 0$, then $b^{-k}=1 / b^{k}$.
10. $(-7)^{-3}=-1 / 343 \quad$ 11. $\quad 8^{1}=8$
12. $\mathbf{1}^{8}=1$

$$
\begin{aligned}
& =\mathbf{1} /(-7)^{3}= \\
& =\mathbf{1} /(-343)
\end{aligned} \quad b^{1}=b
$$

If $b \neq 0$, then $b^{-k}=1 / b^{k}$.

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.
7. $(5)^{-2}=1 / 25$
8. $(-5)^{-2}=1 / 25$
$=1 /(-5)^{2}$
9. $7^{-3}=1 / 343$
$=1 / 5^{2}$

If $b \neq 0$, then $b^{-k}=1 / b^{k} . \quad$ If $b \neq 0$, then $b^{-k}=1 / b^{k} . \quad$ If $b \neq 0$, then $b^{-k}=1 / b^{k}$.
10. $(-7)^{-3}=-1 / 343 \quad$ 11. $\quad 8^{1}=8$
12. $1^{8}=1$

$$
\begin{aligned}
& =\mathbf{1} /(-7)^{3}= \\
& =1 /(-343)
\end{aligned} \quad b^{1}=b
$$

If $b \neq 0$, then $b^{-k}=1 / b^{k}$.

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.
13. $(1 / 2)^{5}=$
14. $(-1 / 2)^{5}=$
15. $(-2 / 3)^{2}=$
16. $(-2 / 3)^{-3}=$ 17. $(3 / 5)^{2}=$ 18. $(3 / 5)^{-3}=$

## Algebra II Class Worksheet \#1 Unit 10

## Evaluate each of the following.

13. $(1 / 2)^{5}=$
14. $(-1 / 2)^{5}=$
15. $(-2 / 3)^{2}=$
16. $(-2 / 3)^{-3}=$ 17. $(3 / 5)^{2}=$ 18. $(3 / 5)^{-3}=$

## Algebra II Class Worksheet \#1 Unit 10

## Evaluate each of the following.

13. $(1 / 2)^{5}=$
14. $(-1 / 2)^{5}=$
15. $(-2 / 3)^{2}=$
16. $(-2 / 3)^{-3}=$ 17. $(3 / 5)^{2}=$ 18. $(3 / 5)^{-3}=$

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.
13. $(1 / 2)^{5}=$
14. $(-1 / 2)^{5}=$
15. $(-2 / 3)^{2}=$

$$
(x / y)^{n}=x^{n} / y^{n}
$$

16. $(-2 / 3)^{-3}=$ 17. $(3 / 5)^{2}=$ 18. $(3 / 5)^{-3}=$

## Algebra II Class Worksheet \#1 Unit 10

## Evaluate each of the following.

13. $(1 / 2)^{5}=$
14. $(-1 / 2)^{5}=$
15. $(-2 / 3)^{2}=$
$=15 / 2^{5}$
$(x / y)^{n}=x^{n} / y^{n}$
16. $(-2 / 3)^{-3}=$ 17. $(3 / 5)^{2}=$ 18. $(3 / 5)^{-3}=$

## Algebra II Class Worksheet \#1 Unit 10

## Evaluate each of the following.

13. $(1 / 2)^{5}=1 / 32$
14. $(-1 / 2)^{5}=$
15. $(-2 / 3)^{2}=$
$=15 / 2^{5}$
$(x / y)^{n}=x^{n} / y^{n}$
16. $(-2 / 3)^{-3}=$ 17. $(3 / 5)^{2}=$ 18. $(3 / 5)^{-3}=$

## Algebra II Class Worksheet \#1 Unit 10

## Evaluate each of the following.

13. $(1 / 2)^{5}=1 / 32$
14. $(-1 / 2)^{5}=$
15. $(-2 / 3)^{2}=$
$=15 / 2^{5}$
$(x / y)^{n}=x^{n} / y^{n}$
16. $(-2 / 3)^{-3}=$
17. $(3 / 5)^{2}=$
18. $(3 / 5)^{-3}=$

## Algebra II Class Worksheet \#1 Unit 10

## Evaluate each of the following.

13. $(1 / 2)^{5}=1 / 32$
14. $(-1 / 2)^{5}=$
15. $(-2 / 3)^{2}=$
$(x / y)^{n}=x^{n} / y^{n}$
$(\mathbf{x} / \mathbf{y})^{n}=\mathbf{x}^{n} / \mathbf{y}^{n}$
16. $(-2 / 3)^{-3}=$
17. $(3 / 5)^{2}=$
18. $(3 / 5)^{-3}=$

## Algebra II Class Worksheet \#1 Unit 10

## Evaluate each of the following.

13. $(1 / 2)^{5}=1 / 32$
14. $(-1 / 2)^{5}=$
$=(-1)^{5} / 2^{5}$
$(x / y)^{n}=x^{n} / y^{n}$
$(x / y)^{n}=x^{n} / y^{n}$
15. $(-2 / 3)^{-3}=$
16. $(3 / 5)^{2}=$
17. $(3 / 5)^{-3}=$

## Algebra II Class Worksheet \#1 Unit 10

## Evaluate each of the following.

$$
\begin{array}{lll}
\text { 13. } \begin{aligned}
(1 / 2)^{5}=1 / 32 & \text { 14. } \\
\begin{array}{l}
(-1 / 2)^{5}=-1 / 32
\end{array} & \text { 15. }(-2 / 3)^{2}= \\
=1^{5} / 2^{5} & =(-1)^{5} / 2^{5} \\
(x / y)^{n}=x^{n} / y^{n} & (x / y)^{n}=x^{n} / y^{n}
\end{aligned} &
\end{array}
$$

16. $(-2 / 3)^{-3}=$
17. $(3 / 5)^{2}=$
18. $(3 / 5)^{-3}=$

## Algebra II Class Worksheet \#1 Unit 10

## Evaluate each of the following.

13. $(1 / 2)^{5}=1 / 32$
14. $(-1 / 2)^{5}=-1 / 32$
15. $(-2 / 3)^{2}=$
$=15 / 2^{5}$
$=(-1)^{5} / 2^{5}$
$(x / y)^{n}=x^{n} / y^{n}$
$(x / y)^{n}=x^{n} / y^{n}$
16. $(-2 / 3)^{-3}=$
17. $(3 / 5)^{2}=$
18. $(3 / 5)^{-3}=$

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.
13. $(1 / 2)^{5}=1 / 32$
14. $(-1 / 2)^{5}=-1 / 32$
15. $(-2 / 3)^{2}=$
$=15 / 2^{5}$
$=(-1)^{5} / 2^{5}$
$(x / y)^{n}=x^{n} / y^{n}$
$(\mathbf{x} / \mathbf{y})^{n}=x^{n} / y^{n}$

$$
(x / y)^{n}=x^{n} / y^{n}
$$

16. $(-2 / 3)^{-3}=$
17. $(3 / 5)^{2}=$
18. $(3 / 5)^{-3}=$

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.
13. $(1 / 2)^{5}=1 / 32$
14. $(-1 / 2)^{5}=-1 / 32$
15. $(-2 / 3)^{2}=$
$=(-1)^{5} / 2^{5}$
$=(-2)^{2} / 3^{2}$
$(x / y)^{n}=x^{n} / y^{n}$
$(\mathbf{x} / \mathbf{y})^{\mathrm{n}}=\mathbf{x}^{\mathrm{n}} / \mathbf{y}^{\mathrm{n}}$
16. $(-2 / 3)^{-3}=$
17. $(3 / 5)^{2}=$
18. $(3 / 5)^{-3}=$

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.
13. $(1 / 2)^{5}=1 / 32$
14. $(-1 / 2)^{5}=-1 / 32$
15. $(-2 / 3)^{2}=4 / 9$
$=15 / 2^{5}$
$=(-1)^{5} / 2^{5}$
$=(-2)^{2} / 3^{2}$
$(\mathbf{x} / \mathbf{y})^{n}=x^{n} / y^{n}$
$(\mathbf{x} / \mathbf{y})^{\mathrm{n}}=\mathbf{x}^{\mathrm{n}} / \mathbf{y}^{\mathrm{n}}$
16. $(-2 / 3)^{-3}=$
17. $(3 / 5)^{2}=$
18. $(3 / 5)^{-3}=$

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.
13. $(1 / 2)^{5}=1 / 32$
14. $(-1 / 2)^{5}=-1 / 32$
15. $(-2 / 3)^{2}=4 / 9$
$=15 / 2^{5}$
$=(-1)^{5} / 2^{5}$
$=(-2)^{2} / 3^{2}$
$(x / y)^{n}=x^{n} / y^{n}$
$(\mathbf{x} / \mathbf{y})^{n}=x^{n} / y^{n}$
$(\mathbf{x} / \mathbf{y})^{\mathrm{n}}=\mathbf{x}^{\mathrm{n}} / \mathbf{y}^{\mathrm{n}}$
16. $(-2 / 3)^{-3}=$
17. $(3 / 5)^{2}=$
18. $(3 / 5)^{-3}=$

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.

$$
\begin{array}{lll}
\text { 13. }(1 / 2)^{5}=1 / 32 & \text { 14. }(-1 / 2)^{5}=-1 / 32 & \text { 15. }(-2 / 3)^{2}=4 / 9 \\
=1^{5} / 2^{5} & =(-1)^{5 / 2^{5}} & =(-2)^{2} / 3^{2} \\
(x / y)^{n}=x^{n} / y^{n} & (x / y)^{n}=x^{n} / y^{n} & (x / y)^{n}=x^{n} / y^{n}
\end{array}
$$

16. $(-2 / 3)^{-3}=$ 17. $(3 / 5)^{2}=$ 18. $(3 / 5)^{-3}=$
$(x / y)^{-n}=(y / x)^{n}$

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.

$$
\begin{array}{lll}
\text { 13. }(1 / 2)^{5}=1 / 32 & \text { 14. }(-1 / 2)^{5}=-1 / 32 & \text { 15. }(-2 / 3)^{2}=4 / 9 \\
=1^{5} / 2^{5} & =(-1)^{5 / 2^{5}} & =(-2)^{2} / 3^{2} \\
(x / y)^{n}=x^{n} / y^{n} & (x / y)^{n}=x^{n} / y^{n} & (x / y)^{n}=x^{n} / y^{n}
\end{array}
$$

16. $(-2 / 3)^{-3}=$
17. $(3 / 5)^{2}=$
18. $(3 / 5)^{-3}=$

$$
=(-3 / 2)^{3}
$$

$(x / y)^{-n}=(y / x)^{n}$

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.

$$
\begin{array}{lll}
\text { 13. }(1 / 2)^{5}=1 / 32 & \text { 14. }(-1 / 2)^{5}=-1 / 32 & \text { 15. }(-2 / 3)^{2}=4 / 9 \\
=1^{5} / 2^{5} & =(-1)^{5 / 2^{5}} & =(-2)^{2} / 3^{2} \\
(x / y)^{n}=x^{n} / y^{n} & (x / y)^{n}=x^{n} / y^{n} & (x / y)^{n}=x^{n} / y^{n}
\end{array}
$$

16. $(-2 / 3)^{-3}=$ 17. $(3 / 5)^{2}=$ 18. $(3 / 5)^{-3}=$ $=(-3 / 2)^{3}$
$(x / y)^{-n}=(y / x)^{n}=y^{n} / x^{n}$

## Algebra II Class Worksheet \#1 Unit 10

## Evaluate each of the following.

16. $(-2 / 3)^{-3}=$ 17. $(3 / 5)^{2}=$ 18. $(3 / 5)^{-3}=$ $=(-3 / 2)^{3}=$

$$
=(-3)^{3 / 2} 2^{3}
$$

$$
(x / y)^{-n}=(y / x)^{n}=y^{n} / x^{n}
$$

$$
\begin{aligned}
& \text { 13. }(1 / 2)^{5}=1 / 32 \\
& =15 / 2^{5} \\
& (x / y)^{n}=x^{n} / y^{n} \\
& \text { 14. }(-1 / 2)^{5}=-1 / 32 \\
& \text { 15. }(-2 / 3)^{2}=4 / 9 \\
& =(-1)^{5} / 2^{5} \\
& =(-2)^{2} / 3^{2} \\
& (x / y)^{n}=x^{n} / y^{n} \\
& (\mathbf{x} / \mathbf{y})^{\mathrm{n}}=\mathbf{x}^{\mathrm{n}} / \mathbf{y}^{\mathrm{n}}
\end{aligned}
$$

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.

$$
\begin{array}{lll}
\text { 13. } \begin{array}{lll}
(1 / 2)^{5}=1 / 32 & \text { 14. }(-1 / 2)^{5}=-1 / 32 & \text { 15. }(-2 / 3)^{2}=4 / 9 \\
=1^{5} / 2^{5} & =(-1)^{5 / 2^{5}} & =(-2)^{2} / 3^{2} \\
(x / y)^{n}=x^{n} / y^{n} & (x / y)^{n}=x^{n} / y^{n} & (x / y)^{n}=x^{n} / y^{n}
\end{array} .
\end{array}
$$

16. $(-2 / 3)^{-3}=-27 / 8 \quad$ 17. $(3 / 5)^{2}=\quad$ 18. $(3 / 5)^{-3}=$ $=(-3 / 2)^{3}=$

$$
=(-3)^{3 / 2} 2^{3}
$$

$$
(x / y)^{-n}=(y / x)^{n}=y^{n} / x^{n}
$$

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.

$$
\begin{array}{lll}
\text { 13. }(1 / 2)^{5}=1 / 32 & \text { 14. }(-1 / 2)^{5}=-1 / 32 & \text { 15. }(-2 / 3)^{2}=4 / 9 \\
=1^{5} / 2^{5} & =(-1)^{5 / 2^{5}} & =(-2)^{2} / 3^{2} \\
(x / y)^{n}=x^{n} / y^{n} & (x / y)^{n}=x^{n} / y^{n} & (x / y)^{n}=x^{n} / y^{n}
\end{array}
$$

16. $(-2 / 3)^{-3}=-27 / 8 \quad$ 17. $(3 / 5)^{2}=$
17. $(3 / 5)^{-3}=$ $=(-3 / 2)^{3}=$

$$
=(-3)^{3 / 2} 2^{3}
$$

$$
(x / y)^{-n}=(y / x)^{n}=y^{n} / x^{n}
$$

## Algebra II Class Worksheet \#1 Unit 10

## Evaluate each of the following.

$$
\text { 13. } \begin{array}{lll}
(1 / 2)^{5}=1 / 32 & \text { 14. }(-1 / 2)^{5}=-1 / 32 & \text { 15. }(-2 / 3)^{2}=4 / 9 \\
=1^{5} / 2^{5} & =(-1)^{5} / 2^{5} & =(-2)^{2} / 3^{2} \\
(x / y)^{n}=x^{n} / y^{n} & (x / y)^{n}=x^{n} / y^{n} & (x / y)^{n}=x^{n} / y^{n}
\end{array}
$$

16. $(-2 / 3)^{-3}=-27 / 8 \quad$ 17. $(3 / 5)^{2}=$
17. $(3 / 5)^{-3}=$ $=(-3 / 2)^{3}=$

$$
=(-3)^{3} / 2^{3}
$$

$$
(x / y)^{n}=x^{n} / y^{n}
$$

$$
(x / y)^{-n}=(y / x)^{n}=y^{n} / x^{n}
$$

## Algebra II Class Worksheet \#1 Unit 10

## Evaluate each of the following.

$$
\text { 13. } \begin{array}{lll}
(1 / 2)^{5}=1 / 32 & \text { 14. }(-1 / 2)^{5}=-1 / 32 & \text { 15. }(-2 / 3)^{2}=4 / 9 \\
=1^{5} / 2^{5} & =(-1)^{5} / 2^{5} & =(-2)^{2} / 3^{2} \\
(x / y)^{n}=x^{n} / y^{n} & (x / y)^{n}=x^{n} / y^{n} & (x / y)^{n}=x^{n} / y^{n}
\end{array}
$$

$$
\begin{aligned}
& \text { 16. }(-2 / 3)^{-3}=-27 / 8 \quad \text { 17. }(3 / 5)^{2}= \\
& =(-3 / 2)^{3}= \\
& =(-3)^{3} / 2^{3} \\
& (x / y)^{-\mathrm{n}}=(\mathrm{y} / \mathbf{x})^{\mathrm{n}}=\mathbf{y}^{\mathrm{n} / \mathbf{x}^{\mathrm{n}}}
\end{aligned}
$$

## Algebra II Class Worksheet \#1 Unit 10

## Evaluate each of the following.

$$
\begin{aligned}
& \text { 13. }(1 / 2)^{5}=1 / 32 \\
& \text { 14. }(-1 / 2)^{5}=-1 / 32 \\
& \text { 15. }(-2 / 3)^{2}=4 / 9 \\
& =15 / 2^{5} \\
& =(-1)^{5} / 2^{5} \\
& =(-2)^{2} / 3^{2} \\
& (\mathbf{x} / \mathbf{y})^{\mathrm{n}}=\mathbf{x}^{\mathrm{n}} / \mathbf{y}^{\mathrm{n}} \\
& (\mathbf{x} / \mathbf{y})^{n}=x^{n} / y^{n} \\
& (\mathbf{x} / \mathbf{y})^{\mathrm{n}}=\mathbf{x}^{\mathrm{n}} / \mathbf{y}^{\mathrm{n}}
\end{aligned}
$$

$$
\begin{array}{l|l|l}
\text { 16. } \begin{aligned}
(-2 / 3)^{-3}=-27 / 8 & \text { 17. }(3 / 5)^{2}=9 / 25 \\
= & \text { 18. }(3 / 5)^{-3}= \\
=(-3 / 2)^{3}= & =3^{2} / 5^{2} \\
=(-3)^{3} / 2^{3} & (x / y)^{n}=x^{n} / y^{n} \\
(x / y)^{-n}=(y / x)^{n}=y^{n} / x^{n} &
\end{aligned}
\end{array}
$$

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.

$$
\begin{array}{lll}
\text { 13. }(1 / 2)^{5}=1 / 32 & \text { 14. }(-1 / 2)^{5}=-1 / 32 & \text { 15. }(-2 / 3)^{2}=4 / 9 \\
=1^{5} / 2^{5} & =(-1)^{5 / 2^{5}} & =(-2)^{2} / 3^{2} \\
(x / y)^{n}=x^{n} / y^{n} & (x / y)^{n}=x^{n} / y^{n} & (x / y)^{n}=x^{n} / y^{n}
\end{array}
$$

16. $(-2 / 3)^{-3}=-27 / 8 \quad$ 17. $(3 / 5)^{2}=9 / 25 \quad$ 18. $(3 / 5)^{-3}=$

$$
=(-3 / 2)^{3}=\quad=3^{2} / 5^{2}
$$

$$
=(-3)^{3} / 2^{3}
$$

$$
(x / y)^{n}=x^{n} / y^{n}
$$

$$
(x / y)^{-n}=(y / x)^{n}=y^{n} / x^{n}
$$

## Algebra II Class Worksheet \#1 Unit 10

## Evaluate each of the following.

$$
\begin{array}{lll}
\text { 13. }(1 / 2)^{5}=1 / 32 & \text { 14. }(-1 / 2)^{5}=-1 / 32 & \text { 15. }(-2 / 3)^{2}=4 / 9 \\
=1^{5} / 2^{5} & =(-1)^{5 / 2^{5}} & =(-2)^{2} / 3^{2} \\
(x / y)^{n}=x^{n} / y^{n} & (x / y)^{n}=x^{n} / y^{n} & (x / y)^{n}=x^{n} / y^{n}
\end{array}
$$

16. $(-2 / 3)^{-3}=-27 / 8 \quad$ 17. $(3 / 5)^{2}=9 / 25 \quad$ 18. $(3 / 5)^{-3}=$ $=(-3 / 2)^{3}=\quad=3^{2} / 5^{2}$ $=(-3)^{3} / 2^{3} \quad(x / y)^{n}=x^{n} / y^{n}$ $(\mathbf{x} / \mathbf{y})^{-\mathrm{n}}=(\mathrm{y} / \mathbf{x})^{\mathrm{n}}=\mathrm{y}^{\mathrm{n} / \mathbf{x}^{\mathrm{n}}} \quad(\mathrm{x} / \mathbf{y})^{-\mathrm{n}}=(\mathrm{y} / \mathbf{x})^{\mathrm{n}}$

## Algebra II Class Worksheet \#1 Unit 10

## Evaluate each of the following.

$$
\begin{array}{lll}
\text { 13. }(1 / 2)^{5}=1 / 32 & \text { 14. }(-1 / 2)^{5}=-1 / 32 & \text { 15. }(-2 / 3)^{2}=4 / 9 \\
=1^{5} / 2^{5} & =(-1)^{5 / 2^{5}} & =(-2)^{2} / 3^{2} \\
(x / y)^{n}=x^{n} / y^{n} & (x / y)^{n}=x^{n} / y^{n} & (x / y)^{n}=x^{n} / y^{n}
\end{array}
$$

16. $(-2 / 3)^{-3}=-27 / 8 \quad$ 17. $(3 / 5)^{2}=9 / 25 \quad$ 18. $(3 / 5)^{-3}=$

$$
=(-3 / 2)^{3}=\quad=3^{2} / 5^{2}
$$

$$
=(5 / 3)^{3}
$$

$$
(x / y)^{n}=x^{n} / y^{n}
$$

$$
(x / y)^{-n}=(y / x)^{n}=y^{n} / x^{n}
$$

$$
(x / y)^{-n}=(y / x)^{n}
$$

## Algebra II Class Worksheet \#1 Unit 10

## Evaluate each of the following.

$$
\begin{array}{lll}
\text { 13. }(1 / 2)^{5}=1 / 32 & \text { 14. }(-1 / 2)^{5}=-1 / 32 & \text { 15. }(-2 / 3)^{2}=4 / 9 \\
=1^{5} / 2^{5} & =(-1)^{5 / 2^{5}} & =(-2)^{2} / 3^{2} \\
(x / y)^{n}=x^{n} / y^{n} & (x / y)^{n}=x^{n} / y^{n} & (x / y)^{n}=x^{n} / y^{n}
\end{array}
$$

$$
\begin{array}{l|l|l}
\text { 16. }(-2 / 3)^{-3}=-27 / 8 & \text { 17. }(3 / 5)^{2}=9 / 25 & \text { 18. }(3 / 5)^{-3}= \\
=(-3 / 2)^{3}= & =3^{2} / 5^{2} & =(5 / 3)^{3} \\
=(-3)^{3} / 2^{3} & (x / y)^{n}=x^{n} / y^{n} & \\
(x / y)^{-n}=(y / x)^{n}=y^{n} / x^{n} & & (x / y)^{-n}=(y / x)^{n}=y^{n} / x^{n}
\end{array}
$$

## Algebra II Class Worksheet \#1 Unit 10

## Evaluate each of the following.

$$
\begin{array}{lll}
\text { 13. }(1 / 2)^{5}=1 / 32 & \text { 14. }(-1 / 2)^{5}=-1 / 32 & \text { 15. }(-2 / 3)^{2}=4 / 9 \\
=1^{5} / 2^{5} & =(-1)^{5 / 2^{5}} & =(-2)^{2} / 3^{2} \\
(x / y)^{n}=x^{n} / y^{n} & (x / y)^{n}=x^{n} / y^{n} & (x / y)^{n}=x^{n} / y^{n}
\end{array}
$$

$$
\begin{array}{llrl}
\text { 16. } & (-2 / 3)^{-3}=-27 / 8 & \text { 17. }(3 / 5)^{2}=9 / 25 & \text { 18. }(3 / 5)^{-3}= \\
=(-3 / 2)^{3}= & =3^{2} / 5^{2} & =(5 / 3)^{3}= \\
=(-3)^{3} / 2^{3} & (x / y)^{n}=x^{n} / y^{n} & =5^{3} / 3^{3} \\
(x / y)^{-n}=(y / x)^{n}=y^{n} / x^{n} & & (x / y)^{-n}=(y / x)^{n}=y^{n} / x^{n}
\end{array}
$$

## Algebra II Class Worksheet \#1 Unit 10

## Evaluate each of the following.

$$
\begin{array}{lll}
\text { 13. }(1 / 2)^{5}=1 / 32 & \text { 14. }(-1 / 2)^{5}=-1 / 32 & \text { 15. }(-2 / 3)^{2}=4 / 9 \\
=1^{5} / 2^{5} & =(-1)^{5 / 2^{5}} & =(-2)^{2 / 3^{2}} \\
(x / y)^{n}=x^{n} / y^{n} & (x / y)^{n}=x^{n} / y^{n} & (x / y)^{n}=x^{n} / y^{n}
\end{array}
$$

16. $(-2 / 3)^{-3}=-27 / 8 \quad$ 17. $(3 / 5)^{2}=9 / 25 \quad$ 18. $(3 / 5)^{-3}=125 / 27$

$$
=(-3 / 2)^{3}=\quad=3^{2} / 5^{2}
$$

$$
=(-3)^{3} / 2^{3}
$$

$(\mathbf{x} / \mathbf{y})^{\mathrm{n}}=\mathbf{x}^{\mathrm{n}} / \mathbf{y}^{\mathrm{n}}$
$=(5 / 3)^{3}=$

$$
=5^{3} / 3^{3}
$$

$$
(x / y)^{-n}=(y / x)^{n}=y^{n} / \mathbf{x}^{n}
$$

$$
(x / y)^{-n}=(y / x)^{n}=y^{n} / x^{n}
$$

## Algebra II Class Worksheet \#1 Unit 10

## Evaluate each of the following.

$$
\begin{array}{lll}
\text { 13. }(1 / 2)^{5}=1 / 32 & \text { 14. }(-1 / 2)^{5}=-1 / 32 & \text { 15. }(-2 / 3)^{2}=4 / 9 \\
=1^{5} / 2^{5} & =(-1)^{5 / 2^{5}} & =(-2)^{2 / 3^{2}} \\
(x / y)^{n}=x^{n} / y^{n} & (x / y)^{n}=x^{n} / y^{n} & (x / y)^{n}=x^{n} / y^{n}
\end{array}
$$

16. $(-2 / 3)^{-3}=-27 / 8 \quad$ 17. $(3 / 5)^{2}=9 / 25 \quad$ 18. $(3 / 5)^{-3}=125 / 27$

$$
=(-3 / 2)^{3}=\quad=3^{2} / 5^{2}
$$

$$
=(5 / 3)^{3}=
$$

$$
=(-3)^{3 / 2} 2^{3}
$$

$$
(x / y)^{n}=x^{n} / y^{n}
$$

$$
=5^{3} / 3^{3}
$$

$$
(x / y)^{-n}=(y / x)^{n}=y^{n} / x^{n}
$$

$$
(x / y)^{-n}=(y / x)^{n}=y^{n} / x^{n}
$$

## Algebra II Class Worksheet \#1 Unit 10

Evaluate each of the following.

$$
\begin{array}{lll}
\text { 13. } \begin{array}{lll}
(1 / 2)^{5}=1 / 32 & \text { 14. }(-1 / 2)^{5}=-1 / 32 & \text { 15. }(-2 / 3)^{2}=4 / 9 \\
=1^{5} / 2^{5} & =(-1)^{5 / 2^{5}} & =(-2)^{2} / 3^{2} \\
(x / y)^{n}=x^{n} / y^{n} & (x / y)^{n}=x^{n} / y^{n} & (x / y)^{n}=x^{n} / y^{n}
\end{array} .
\end{array}
$$

$$
\begin{aligned}
& \text { 16. }(-2 / 3)^{-3}=-27 / 8 \quad \text { 17. }(3 / 5)^{2}=9 / 25 \quad \text { 18. }(3 / 5)^{-3}=125 / 27 \\
& =(-3 / 2)^{3}=\quad=3^{2} / 5^{2} \\
& =(-3)^{3} / 2^{3} \\
& (x / y)^{n}=x^{n} / y^{n} \\
& =(5 / 3)^{3}= \\
& =53 / 3^{3} \\
& (x / y)^{-n}=(y / x)^{n}=y^{n} / x^{n} \\
& (x / y)^{-n}=(y / x)^{n}=y^{n} / x^{n}
\end{aligned}
$$

