

Name \_\_\_\_\_

Date \_\_\_\_\_

**Graphing Exponential Functions**

$y = 2^x$

State 3 points on Graph\_\_\_\_\_

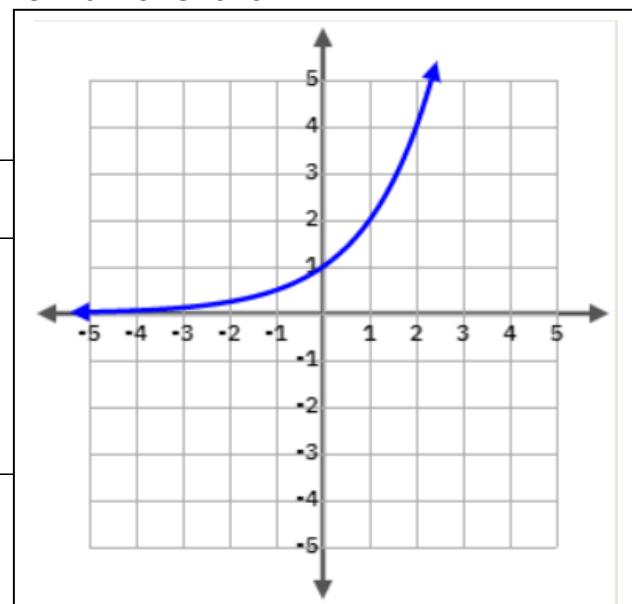
Domain\_\_\_\_\_

Range\_\_\_\_\_

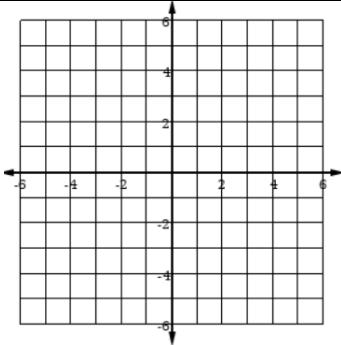
Asymptote\_\_\_\_\_

Solutions\_\_\_\_\_ Y-int \_\_\_\_\_

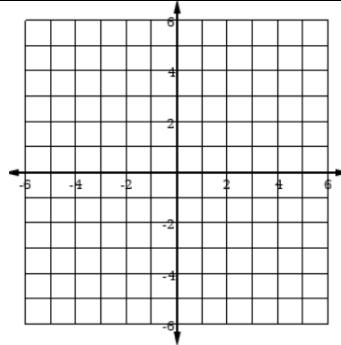
Increasing\_\_\_\_\_ Decreasing\_\_\_\_\_

End Behavior  $x \rightarrow \underline{\hspace{2cm}}, f(x) \rightarrow \underline{\hspace{2cm}}$   
 $x \rightarrow \underline{\hspace{2cm}}, f(x) \rightarrow \underline{\hspace{2cm}}$ 

1.  $y = 5^{x-2}$



2.  $y = -3^x + 4$



Transformations\_\_\_\_\_

State 3 points on Graph\_\_\_\_\_

Domain\_\_\_\_\_ Range\_\_\_\_\_

Asymptote\_\_\_\_\_

Intercept(s)\_\_\_\_\_

Increasing\_\_\_\_\_ Decreasing\_\_\_\_\_

End Behavior  $x \rightarrow \underline{\hspace{2cm}}, f(x) \rightarrow \underline{\hspace{2cm}}$   
 $x \rightarrow \underline{\hspace{2cm}}, f(x) \rightarrow \underline{\hspace{2cm}}$ 

Transformations\_\_\_\_\_

State 3 points on Graph\_\_\_\_\_

Domain\_\_\_\_\_ Range\_\_\_\_\_

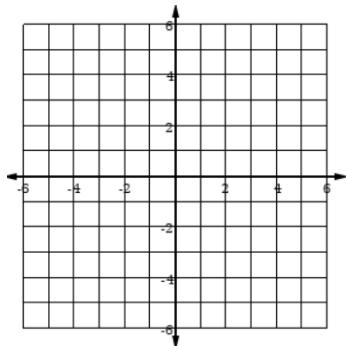
Asymptote\_\_\_\_\_

Intercept(s)\_\_\_\_\_

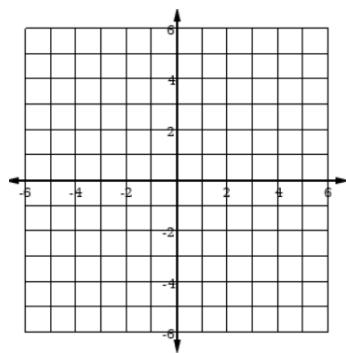
Increasing\_\_\_\_\_ Decreasing\_\_\_\_\_

End Behavior  $x \rightarrow \underline{\hspace{2cm}}, f(x) \rightarrow \underline{\hspace{2cm}}$   
 $x \rightarrow \underline{\hspace{2cm}}, f(x) \rightarrow \underline{\hspace{2cm}}$

3.  $y = \left(\frac{1}{2}\right)^x + 3$



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



Transformations\_\_\_\_\_

State 3 points on Graph\_\_\_\_\_

Domain\_\_\_\_\_ Range\_\_\_\_\_

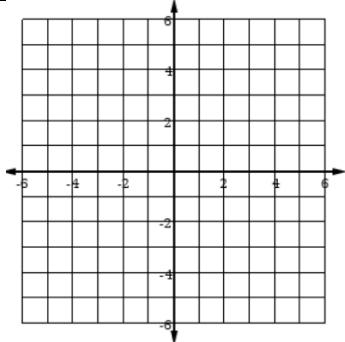
Asymptote\_\_\_\_\_

Intercept(s)\_\_\_\_\_

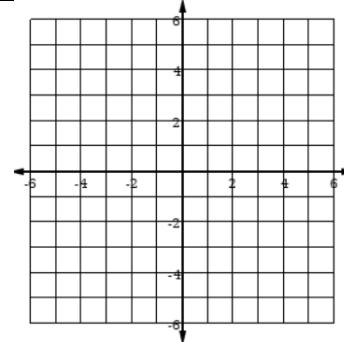
Increasing\_\_\_\_\_ Decreasing\_\_\_\_\_

End Behavior  $x \rightarrow \underline{\hspace{2cm}}, f(x) \rightarrow \underline{\hspace{2cm}}$   
 $x \rightarrow \underline{\hspace{2cm}}, f(x) \rightarrow \underline{\hspace{2cm}}$

5.  $f(x) = 4^{x-2} - 4$



6.  $y = -\left(\frac{1}{3}\right)^{x+1} - 2$



Transformations\_\_\_\_\_

State 3 points on Graph\_\_\_\_\_

Domain\_\_\_\_\_ Range\_\_\_\_\_

Asymptote\_\_\_\_\_

Intercept(s)\_\_\_\_\_

Increasing\_\_\_\_\_ Decreasing\_\_\_\_\_

End Behavior  $x \rightarrow \underline{\hspace{2cm}}, f(x) \rightarrow \underline{\hspace{2cm}}$   
 $x \rightarrow \underline{\hspace{2cm}}, f(x) \rightarrow \underline{\hspace{2cm}}$

Transformations\_\_\_\_\_

State 3 points on Graph\_\_\_\_\_

Domain\_\_\_\_\_ Range\_\_\_\_\_

Asymptote\_\_\_\_\_

Intercept(s)\_\_\_\_\_

Increasing\_\_\_\_\_ Decreasing\_\_\_\_\_

End Behavior  $x \rightarrow \underline{\hspace{2cm}}, f(x) \rightarrow \underline{\hspace{2cm}}$   
 $x \rightarrow \underline{\hspace{2cm}}, f(x) \rightarrow \underline{\hspace{2cm}}$