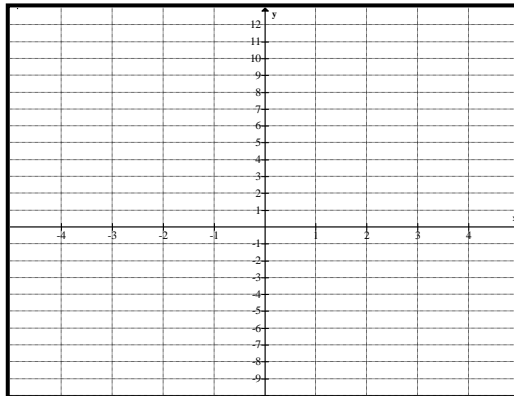


**Practice – Graphs of Exponential Functions**

Name \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_\_

1.  $y = 3 \cdot 2^x$

<b>x</b>	<b>y</b>
-3	
-2	
-1	
0	
1	
2	



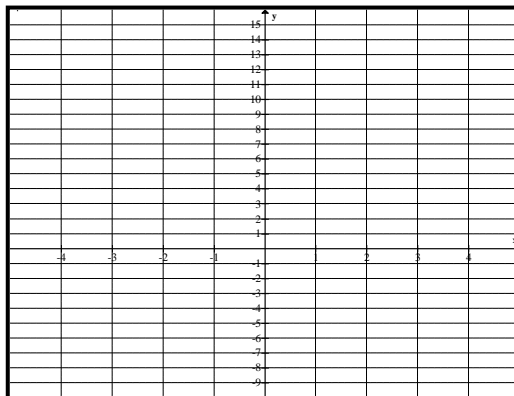
Increasing/Decreasing  
\_\_\_\_\_

Domain: \_\_\_\_\_

Range: \_\_\_\_\_

2.  $f(x) = 4 \cdot \left(\frac{1}{2}\right)^x$

<b>x</b>	<b>y</b>
-2	
-1	
0	
1	
2	
3	



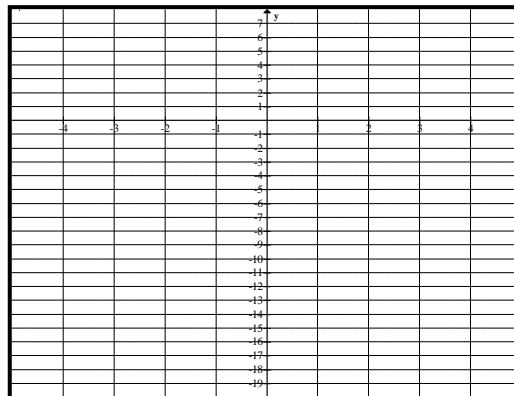
Increasing/Decreasing  
\_\_\_\_\_

Domain: \_\_\_\_\_

Range: \_\_\_\_\_

3.  $y = -2 \cdot 3^x$

<b>x</b>	<b>y</b>
-2	
-1	
0	
1	
2	



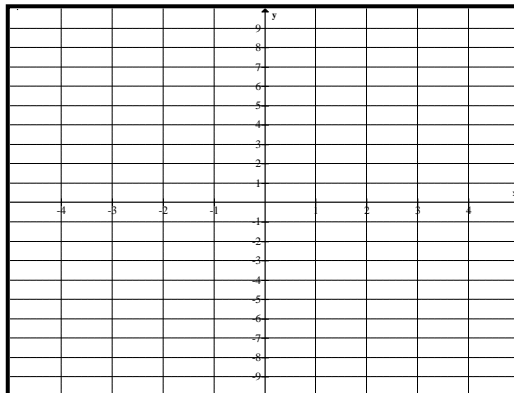
Increasing/Decreasing  
\_\_\_\_\_

Domain: \_\_\_\_\_

Range: \_\_\_\_\_

4.  $y = -2(0.25)^x$

<b>x</b>	<b>y</b>
-2	
-1	
0	
1	
2	



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

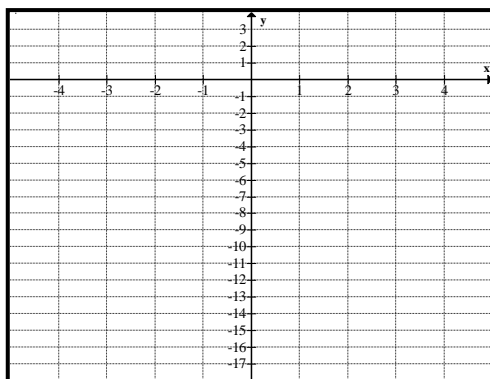
Domain: \_\_\_\_\_

Range: \_\_\_\_\_

PAP Algebra I Unit 9: Exponential Functions

5.  $f(x) = -\left(\frac{1}{4}\right)^x$

$x$	$y$
-2	
-1	
0	
1	
2	



Increasing/Decreasing

\_\_\_\_\_

Domain: \_\_\_\_\_

Range: \_\_\_\_\_

6. Given the equation  $f(x) = a \cdot 5^x$ , what value(s) of  $a$  will make the graph increase at a slower rate?

7. Which function is not decreasing?

A  $y = -(3)^x$

B  $y = 2\left(\frac{1}{6}\right)^x$

C  $y = \left(\frac{1}{4}\right)(2)^x$

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

8. Which of the following is an example of a exponential parent function?

A  $f(x) = x$

B  $f(x) = x^2$

C  $f(x) = 2^x$

D Does Not Exist