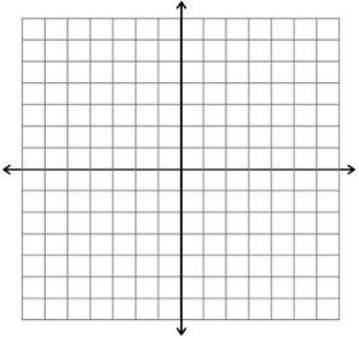
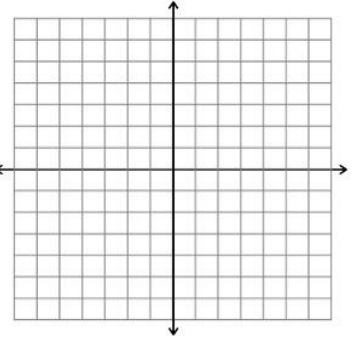
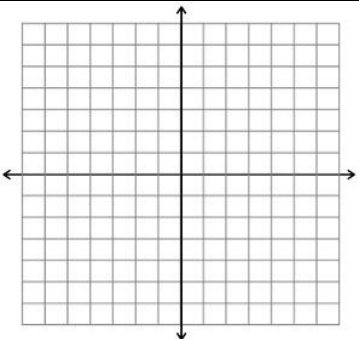
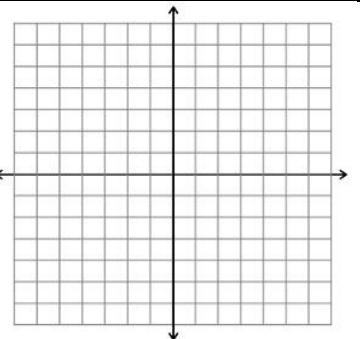
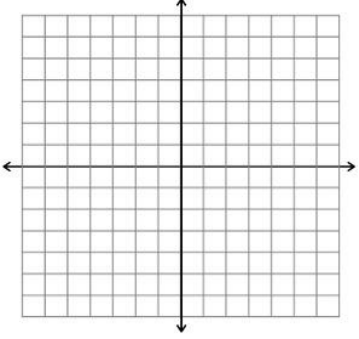
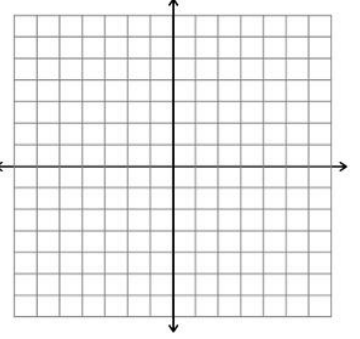
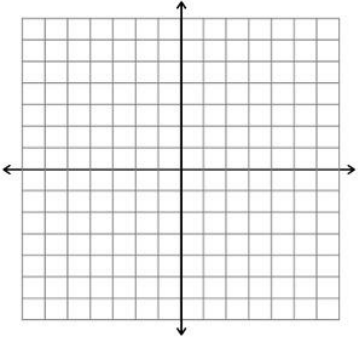
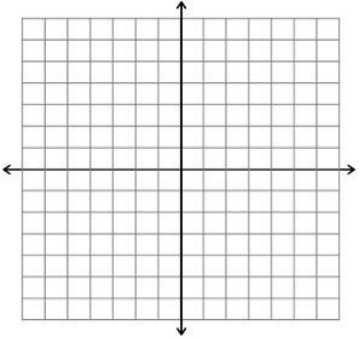
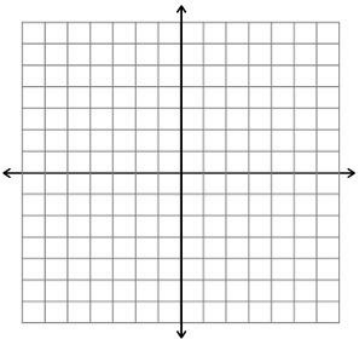
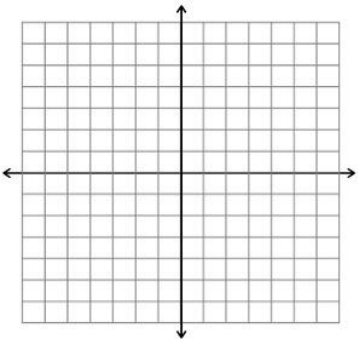
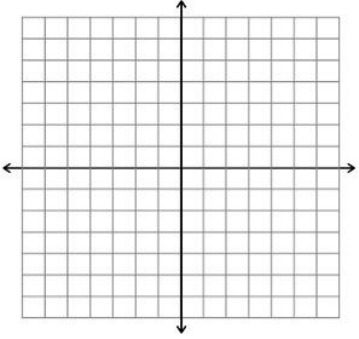
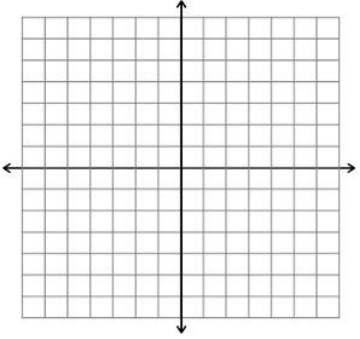


WS 5-2

Exponential Function Graphing

Graph each function. Then, identify the domain, range, and y-intercept.

1. $y = 2^x$				2. $y = -(5)^x$				
x	y	(x, y)		x	y	(x, y)		
-2				-2				
-1				-1				
0				0				
1				1				
2			2					
			Domain:			Domain:		
			Range:			Range:		
			y-intercept:			y-intercept:		
3. $y = -\left(\frac{1}{5}\right)^x$				4. $y = 3\left(\frac{1}{4}\right)^x$				
x	y	(x, y)		x	y	(x, y)		
-2				-2				
-1				-1				
0				0				
1				1				
2			2					
			Domain:			Domain:		
			Range:			Range:		
			y-intercept:			y-intercept:		
5. $y = 6^x + 3$				6. $y = 2 - 2^x$				
x	y	(x, y)		x	y	(x, y)		
-2				-2				
-1				-1				
0				0				
1				1				
2			2					
			Domain:			Domain:		
			Range:			Range:		
			y-intercept:			y-intercept:		

7. $y = 3(2)^x - 4$						8. $y = 2^{x+1}$					
x	y	(x, y)				x	y	(x, y)			
-2						-2					
-1						-1					
0			Domain:			0			Domain:		
1			Range:			1			Range:		
2			y-intercept:			2			y-intercept:		
9. $y = 3^{x-1} - 1$						10. $y = 2 - (\frac{1}{2})^x$					
x	y	(x, y)				x	y	(x, y)			
-2						-2					
-1						-1					
0			Domain:			0			Domain:		
1			Range:			1			Range:		
2			y-intercept:			2			y-intercept:		
11. $y = -(2)^x + 4$						12. $y = 4^x - 6$					
x	y	(x, y)				x	y	(x, y)			
-2						-2					
-1						-1					
0			Domain:			0			Domain:		
1			Range:			1			Range:		
2			y-intercept:			2			y-intercept:		

Determine if the set of data is *linear*, *exponential*, or *neither*.

13.	<table border="1"> <tbody> <tr> <td>x</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td></tr> <tr> <td>y</td><td>-4</td><td>-2</td><td>0</td><td>2</td><td>4</td><td>6</td></tr> </tbody> </table>	x	1	2	3	4	5	6	y	-4	-2	0	2	4	6	14.	<table border="1"> <tbody> <tr> <td>x</td><td>2</td><td>4</td><td>6</td><td>8</td><td>10</td><td>12</td></tr> <tr> <td>y</td><td>1</td><td>4</td><td>16</td><td>64</td><td>256</td><td>1024</td></tr> </tbody> </table>	x	2	4	6	8	10	12	y	1	4	16	64	256	1024
x	1	2	3	4	5	6																									
y	-4	-2	0	2	4	6																									
x	2	4	6	8	10	12																									
y	1	4	16	64	256	1024																									
15.	<table border="1"> <tbody> <tr> <td>x</td><td>-6</td><td>-3</td><td>0</td><td>3</td></tr> <tr> <td>y</td><td>5</td><td>10</td><td>15</td><td>20</td></tr> </tbody> </table>	x	-6	-3	0	3	y	5	10	15	20	16.	<table border="1"> <tbody> <tr> <td>x</td><td>20</td><td>30</td><td>40</td><td>50</td><td>60</td></tr> <tr> <td>y</td><td>1</td><td>0.4</td><td>0.16</td><td>0.064</td><td>0.0256</td></tr> </tbody> </table>	x	20	30	40	50	60	y	1	0.4	0.16	0.064	0.0256						
x	-6	-3	0	3																											
y	5	10	15	20																											
x	20	30	40	50	60																										
y	1	0.4	0.16	0.064	0.0256																										

