

Algebra 1
6.3 Worksheet #2

Name _____

Determine whether the equation represents an exponential function. Explain.

1. $y = 2(15)^x$	2. $y = 6(-11)^x$																								
3. <table border="1"><tr><td>x</td><td>-2</td><td>-1</td><td>0</td><td>1</td><td>2</td></tr><tr><td>y</td><td>1</td><td>5</td><td>25</td><td>125</td><td>625</td></tr></table>	x	-2	-1	0	1	2	y	1	5	25	125	625	4. <table border="1"><tr><td>x</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td></tr><tr><td>y</td><td>2</td><td>6</td><td>10</td><td>14</td><td>18</td></tr></table>	x	7	8	9	10	11	y	2	6	10	14	18
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y	1	5	25	125	625																				
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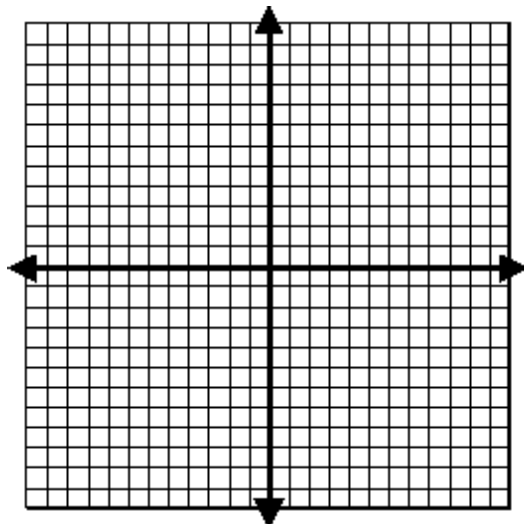
Evaluate the function for the given value of x .

5. $y = 4^x; x = -2$	6. $y = 3(5)^x; x = 2$
7. $y = -7(2)^x; x = -5$	8. $f(x) = 0.25^x; x = -4$
9. $f(x) = -\frac{1}{6}(6)^x; x = 3$	10. $y = \frac{1}{9}(27)^x; x = \frac{2}{3}$

11. The function $y = 3(2)^x$ represents the population of bees in the beehive, where x represents the number of days. How many bees are in the beehive after 4 days?

Graph each function by creating a table of values.

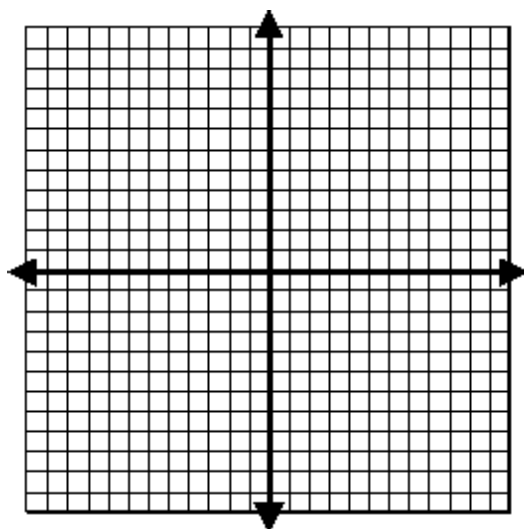
12. $f(x) = 3^x + 1$



Set Notation	Interval Notation	Asymptote:
Domain:	Domain:	Parent Function:
Range:	Range:	Translation from parent:

Graph each function by creating a table of values.

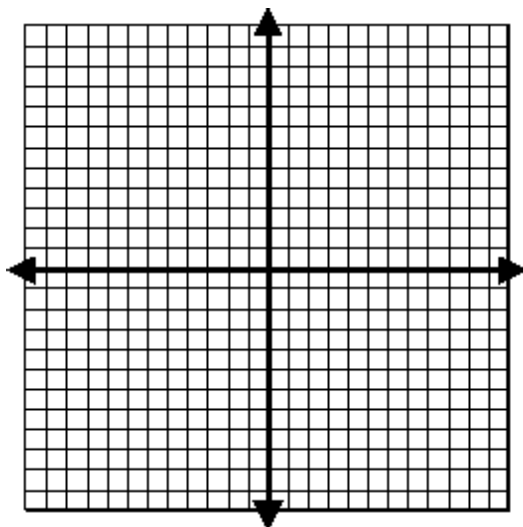
13. $f(x) = 3^{x-1}$



Set Notation	Interval Notation	Asymptote:
Domain:	Domain:	Parent Function:
Range:	Range:	Translation from parent:

Graph each function by creating a table of values.

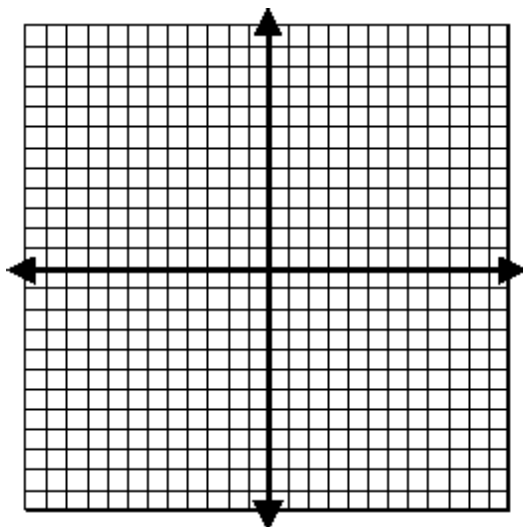
14. $f(x) = \left(\frac{1}{2}\right)^x$



Set Notation	Interval Notation	Asymptote:
Domain:	Domain:	Parent Function:
Range:	Range:	Translation from parent:

Graph each function by creating a table of values.

15. $f(x) = \left(\frac{1}{2}\right)^x - 3$



Set Notation	Interval Notation	Asymptote:
Domain:	Domain:	Parent Function:
Range:	Range:	Translation from parent: