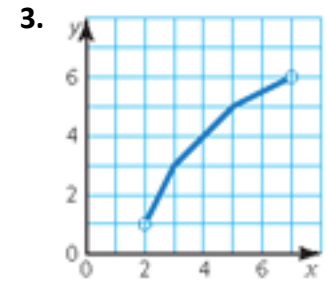
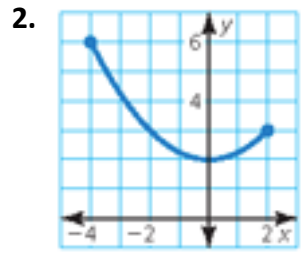
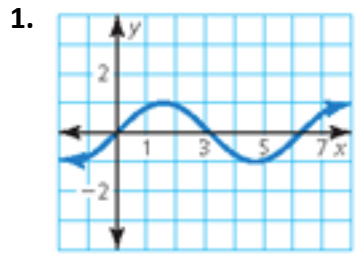


Name: \_\_\_\_\_ Date: \_\_\_\_\_ Band: \_\_\_\_\_  
 Algebra 2

**Unit 1: Functions PBA Practice**

Find the domain and range of the function represented by the graph.



Evaluate the function when  $x = -2, 0,$  and  $5.$

4.  $f(x) = 3x^3$

5.  $r(x) = -x^2 - 7$

6.  $b(x) = 18 - 0.5x$

Find the value of  $x$  so that the function has the given value.

7.  $q(x) = \frac{1}{2}x - 3; q(x) = -4$

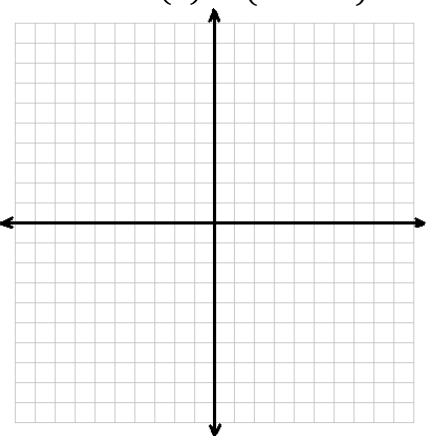
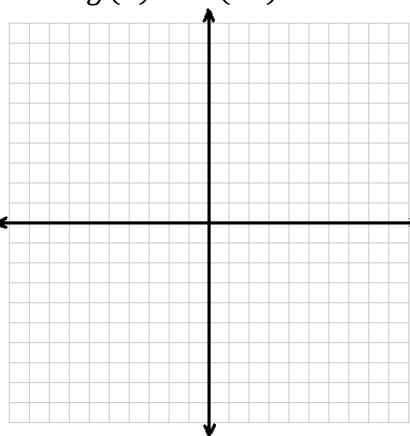
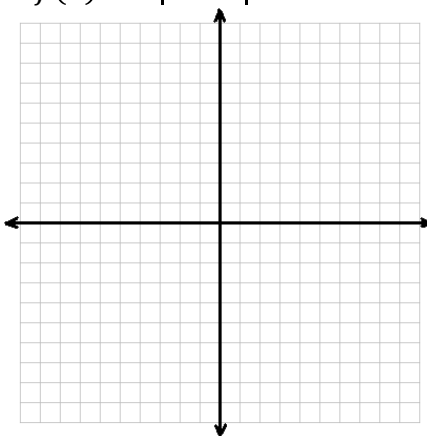
8.  $j(x) = -x^2 + 7; j(x) = -2$

Identify the parent function. Describe the transformation in words. Graph at least 3 points.

9.  $f(x) = 2|x + 3| + 2$

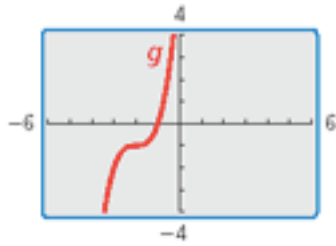
10.  $g(x) = -(2x)^2$

11.  $h(x) = (-x - 1)^3 + 2$

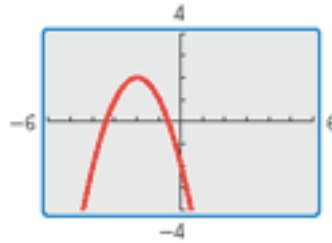


Identify the parent function. Describe the transformation in words. Write an equation of the transformed function.

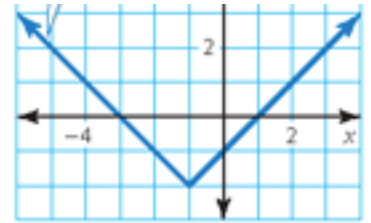
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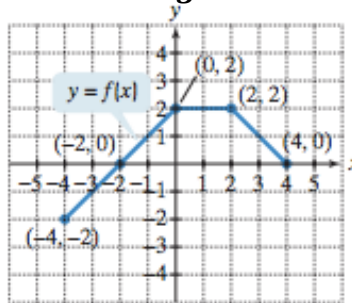
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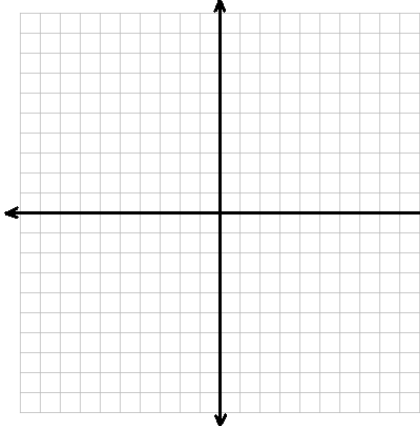
14.



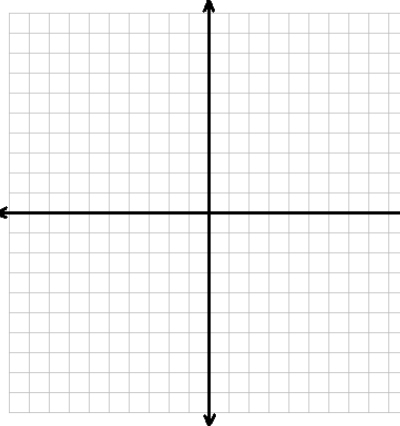
Use the graph of  $y = f(x)$  to graph each function  $g$ .



15.  $g(x) = f(-x)$



16.  $g(x) = 2f(x)$



17.  $g(x) = -f(x - 1) + 1$

