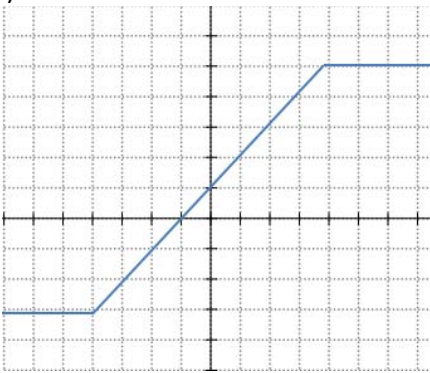
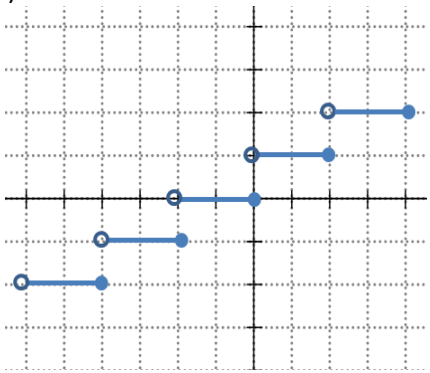
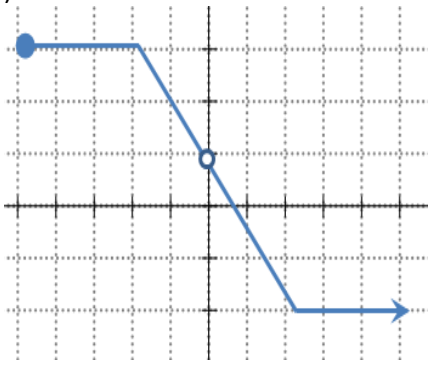
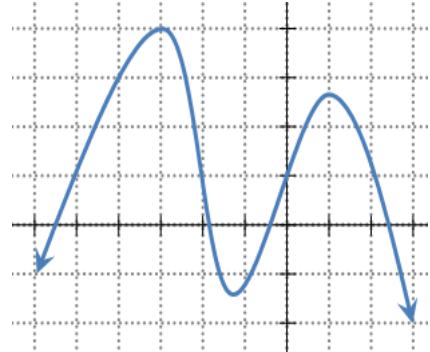
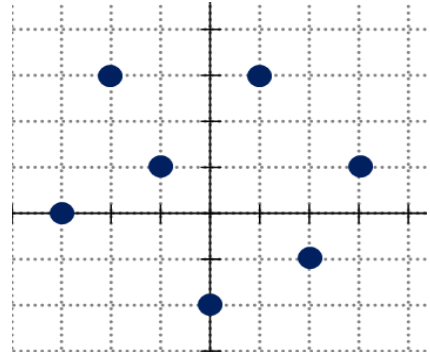
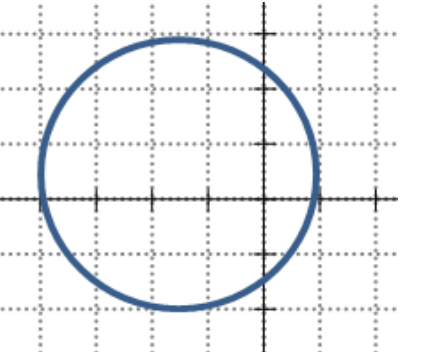
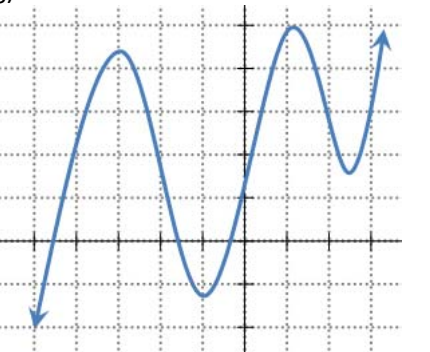
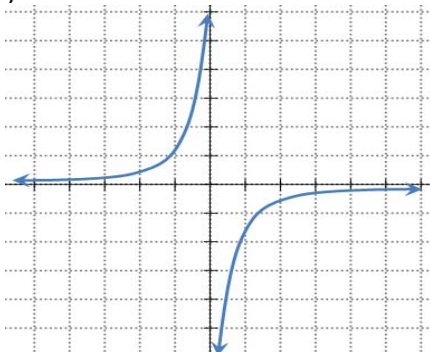



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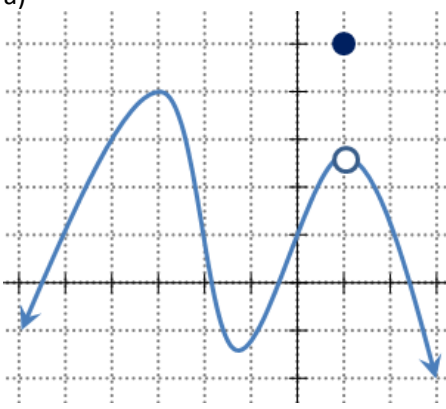
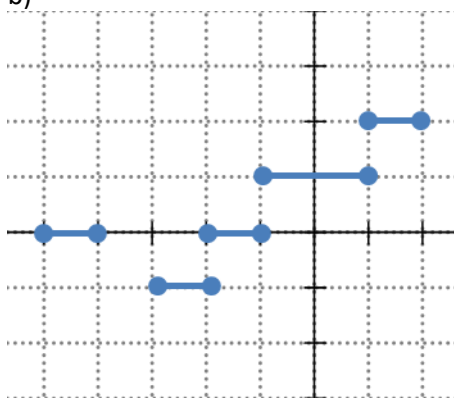
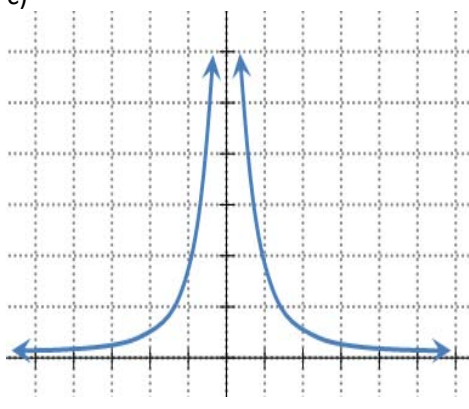
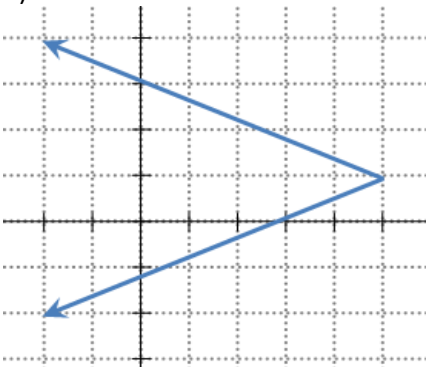
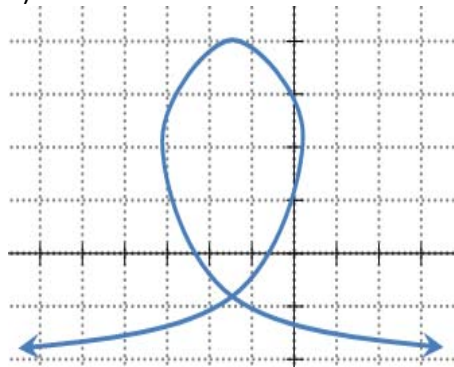
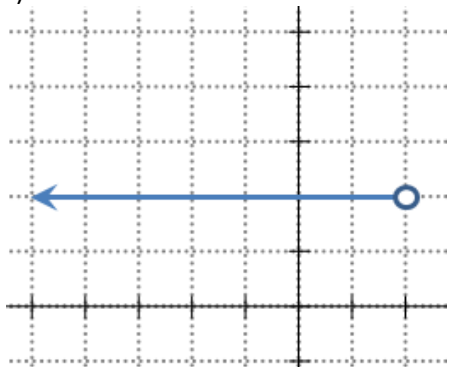
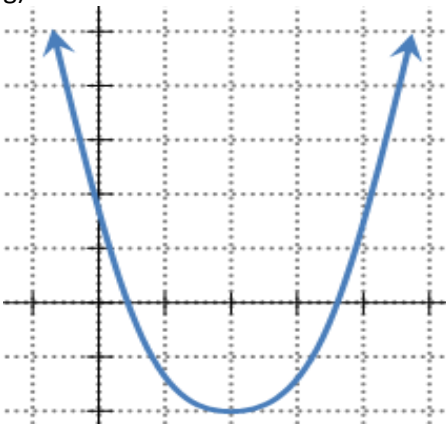
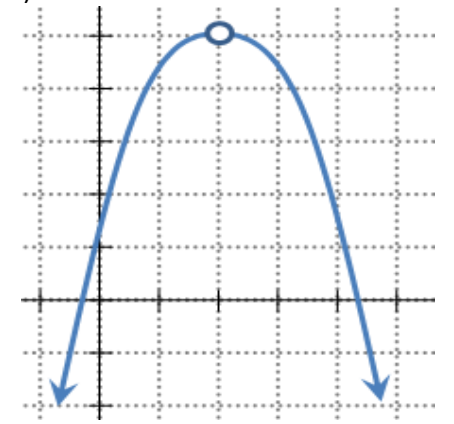
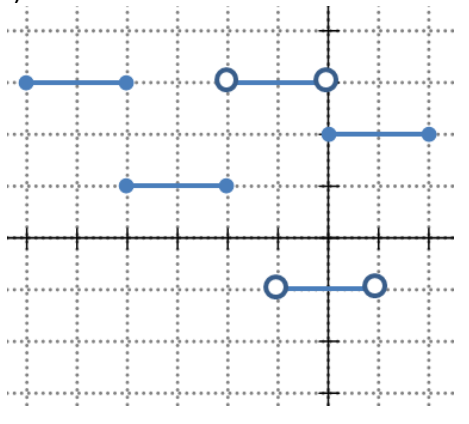
Date: \_\_\_\_\_

**Math 10 honors: Assignment 0.3 Introduction to Domain and Range**

1. Given each of the following graphs, indicate the domain and range:

<p>a)</p>  <p>Domain:</p> <p>Range:</p>	<p>b)</p>  <p>Domain:</p> <p>Range:</p>	<p>c)</p>  <p>Domain:</p> <p>Range:</p>
<p>d)</p>  <p>Domain:</p> <p>Range:</p>	<p>e)</p>  <p>Domain:</p> <p>Range:</p>	<p>f)</p>  <p>Domain:</p> <p>Range:</p>
<p>g)</p>  <p>Domain:</p> <p>Range:</p>	<p>h)</p>  <p>Domain:</p> <p>Range:</p>	<p>i)</p>  <p>Domain:</p> <p>Range:</p>

2. Indicate the domain and range for each of the following graphs:

<p>a)</p>  <p>Domain:</p> <p>Range:</p>	<p>b)</p>  <p>Domain:</p> <p>Range:</p>	<p>c)</p>  <p>Domain:</p> <p>Range:</p>
<p>d)</p>  <p>Domain:</p> <p>Range:</p>	<p>e)</p>  <p>Domain:</p> <p>Range:</p>	<p>f)</p>  <p>Domain:</p> <p>Range:</p>
<p>g)</p>  <p>Domain:</p> <p>Range:</p>	<p>h)</p>  <p>Domain:</p> <p>Range:</p>	<p>i)</p>  <p>Domain:</p> <p>Range:</p>

3. Indicate the domain and range for each of the following equations. Draw a quick sketch of the graph with the space provided if necessary:

a) $y = -2x + 4$  Domain:  Range:	b) $2x = 4$  Domain:  Range:	c) $y =  3x - 6 $  Domain:  Range:
d) $y = x^2$  Domain:  Range:	e) $y = -x^2 - 3$  Domain:  Range:	f) $y = x^2 - 7$  Domain:  Range:
g) $y = \sqrt{x - 3}$  Domain:  Range:	h) $y = -\sqrt{x + 2}$  Domain:  Range:	i) $y = -\sqrt{-x + 5}$  Domain:  Range:
j) $y =  x^2 - 4 $  Domain:  Range:	k) $y = \frac{1}{x - 3}$  Domain:  Range:	l) $y = \frac{1}{x^2 - 16}$  Domain:  Range:
m) $3y - 4 = 0$  Domain:  Range:	n) $x^2 + y^2 = 9$  Domain:  Range:	o) $x^2 + y^2 = 10$  Domain:  Range:

4. Given that  $g(x)$  is a linear function such that  $g(x) = 6$ , what is the domain and range of the function?
  
5. Jacky went to Tim Hortons to buy donuts. They cost \$0.55 per donut. If "x" is the number of donuts purchased and "y" is the total cost, what is the domain of "x" and the range of "y"?
  
6. Susan took a taxi to go home. The cost "C" of the taxi was 1.75 per km and a fixed cost of \$5.00. What is the domain and range of this scenario?
  
7. The fuel efficiency of a Toyota Camry is about 700km per 70L of gasoline. If "D" is the number of kilometers driven and "L" is the Litres of gasoline required, what is the domain and range of this scenario?
  
8. Janet is going to the PNE fair. Tickets cost \$5 for kids between ages 8 to 13, \$15 for ages between 14 to 65, \$12 for seniors above 65 years of age, and kids under 7 are for free. What is the domain and range of this scenario?
  
9. Given the functions  $f(x) = 4x - 2$  and  $g(x) = x^2$ . If the domain of  $f(x)$  are all real numbers, then what is the domain and range of  $g(f(x))$ ? What is the domain and range of  $f(g(x))$ ?

10. Given the functions  $f(x) = x^2 + 2$  and  $g(x) = \sqrt{x+2}$ .

a. Find the domain and range of  $g(f(x))$ ?

b. Find the domain range of  $f(g(x))$ ?

11. Given the functions  $f(x) = \sqrt{x^2 - 1}$  and  $g(x) = \sqrt{x - 2}$ .

a. Find the domain and range of  $g(f(x))$ ?

b. Find the domain range of  $f(g(x))$ ?

12. Given the functions  $f(x) = \frac{3x}{x-1}$  and  $g(x) = \frac{2}{x}$ .

a. Find the domain and range of  $g(f(x))$ ?

b. Find the domain range of  $f(g(x))$ ?