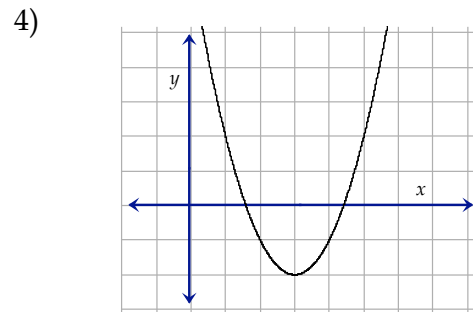
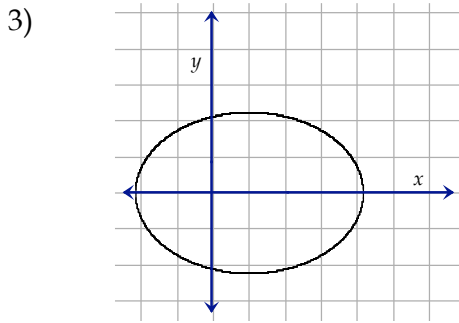


For each of the following, is y a function of x ?

1) $\{(2,3), (0,-5), (-4,3)\}$

2) $\{(-3,5), (8,6), (-3,1)\}$



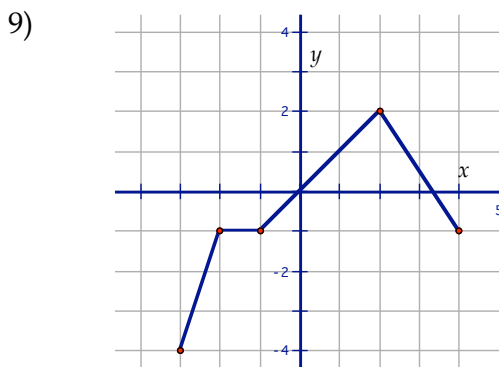
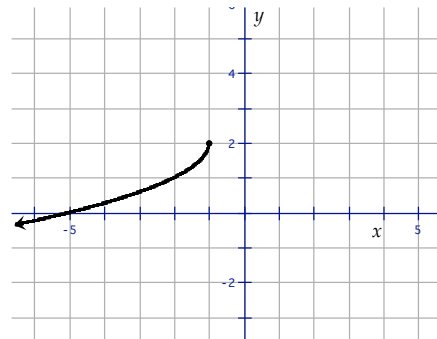
5) $y = 3x^3 + 1$

6) $|y| = x$

Find the domain and range of each function below.

7) $\{(-2,4), (5,11), (0,6), (-4,2)\}$

8)



10) Tickets to a play cost \$8 each, with a limit of 5 tickets.

11) If $f(x) = \{(5, 0), (3, 4), (0, 3), (4, -3)\}$, find $f(0)$.

12) If $g(x) = -3x^2 + 5x$, find $g(-2)$.

Determine the independent and dependent variables in each situation.

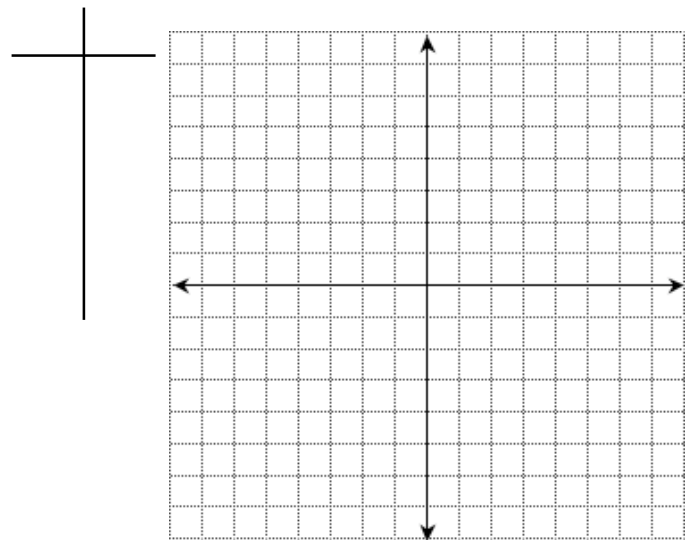
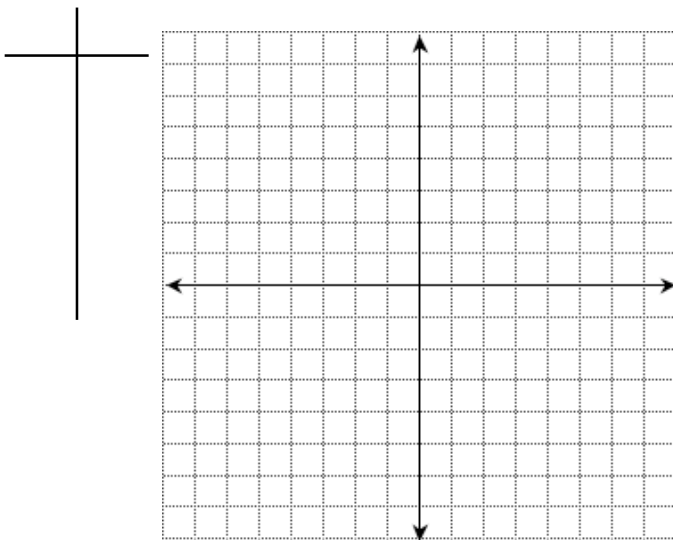
13) A bathtub is filling up at a rate of 2 gallons each minute.

14) Daniel is buying candy bars in a vending machine that charges \$1.25 per candy bar.

Graph the following functions. Don't forget to find at least 5 ordered pairs, show a scale, and label your axes.

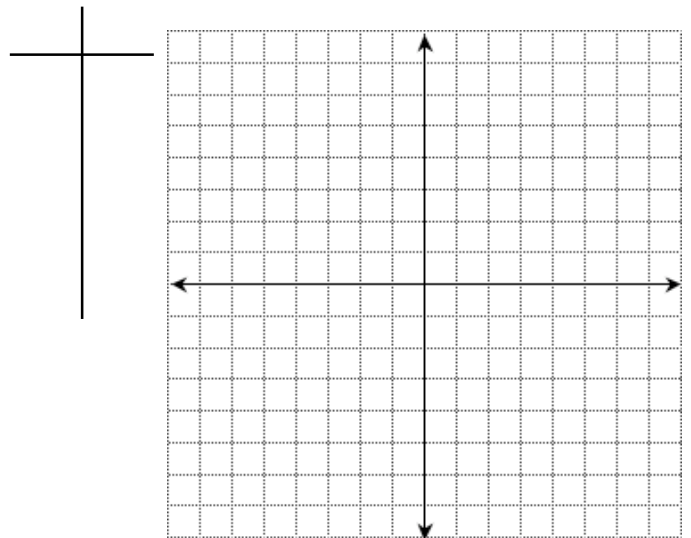
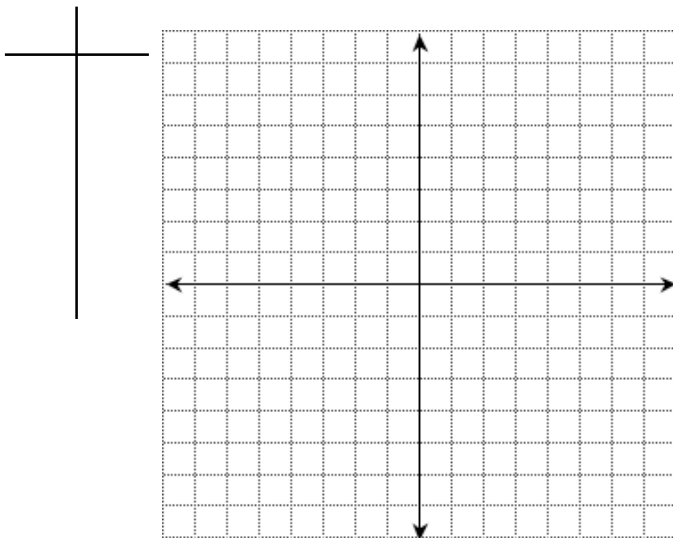
15) $y = -\frac{3}{2}x + 4$

16) $f(x) = -x^2 - 2x$



17) $g(x) = -2|x| + 3$

18) $h(x) = \sqrt{x} - 2$



Answer Key

1) Yes

2) No

3) No

4) Yes

5) Yes

6) No

7) $D = \{-4, -2, 0, 5\}$
 $R = \{2, 4, 6, 11\}$

8) $D = \{x \leq -1\}$
 $R = \{y \leq 2\}$

9) $D = \{-3 \leq x \leq 4\}$
 $R = \{-4 \leq y \leq 2\}$

10) $D = \{1, 2, 3, 4, 5\}$
 $R = \{8, 16, 24, 32, 40\}$

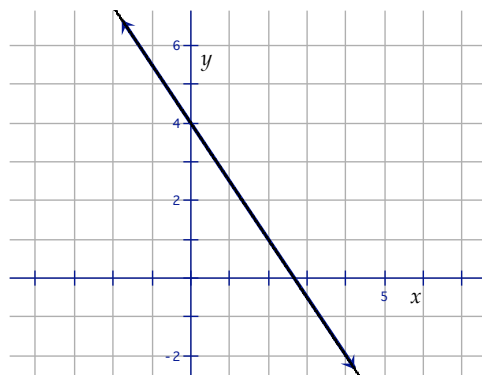
11) 3

12) -22

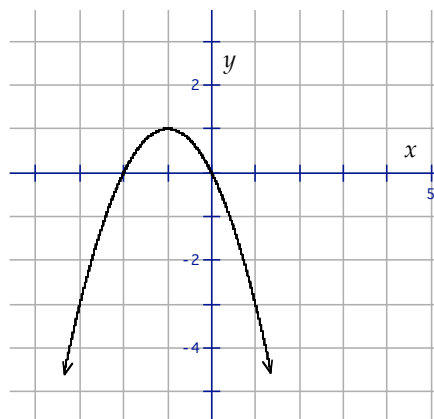
13) independent = number of minutes
 dependent = number of gallons

14) independent = number of candy bars
 dependent = cost

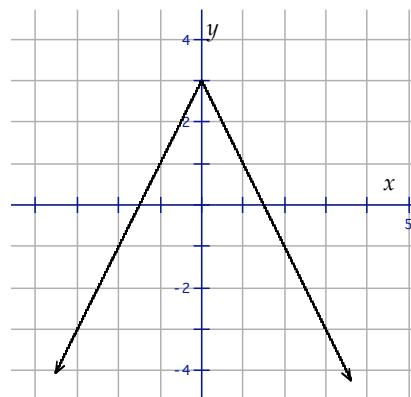
15)



16)



17)



18)

