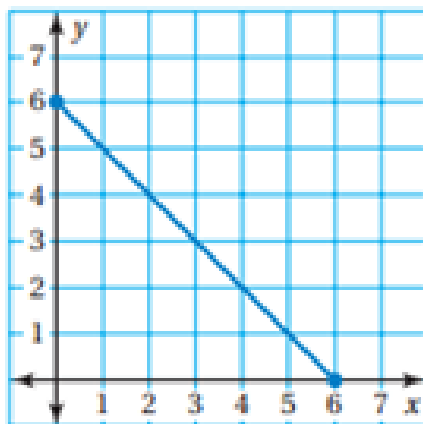


Grab a Warm Up on the front table and get to work. Have your homework out and ready check. QUIZ TOMORROW!

Classwork - Quiz Review

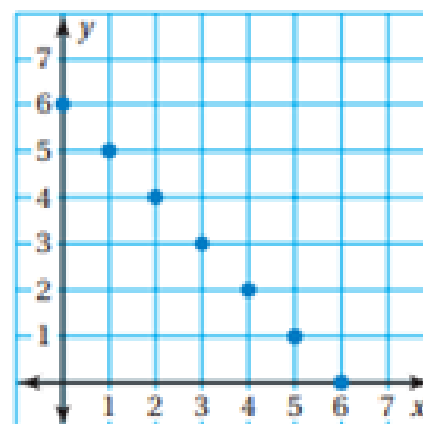
1) Is the domain discrete or continuous? Circle your answer.

A)



Discrete or Continuous

B)



Discrete or Continuous

Determine the independent and dependent value of each situation and write a function that represents the situation. Then, determine if each situation is a discrete or continuous graph.

2) Your class is going on a field trip to the history museum and tickets cost \$5.85 per ticket. Write a function where the total cost c is a function of the number of students going on the field trip s .

IV: # of students

DV: total cost

Function: $C = 5.85s$

Circle Answer: Discrete or Continuous

B) How much would it cost for 42 students to go on the field trip?

$$C = 5.85(42) \quad C = \$245.70$$

3) A tree grows at the rate of 3 feet every year. Write a function where the tree's height h is a function of the number of years n .

IV: # of years

DV: height

Function: $h = 3n$

Circle Answer: Discrete or Continuous

B) How many years will it take for the tree to reach a height of 42 feet tall?

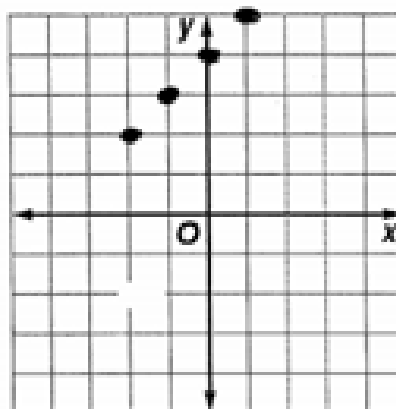
$$\begin{aligned} 42 &= 3n \\ \div 3 & \quad \div 3 \\ n &= 14 \text{ years} \end{aligned}$$

Graph each function.

Complete the function table. Then graph the function.

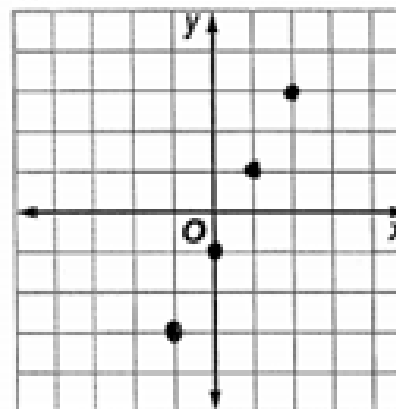
1. $y = x + 4$

x	$x + 4$	y	(x, y)
-2	$-2 + 4$	2	$(-2, 2)$
-1	$-1 + 4$	3	$(-1, 3)$
0	$0 + 4$	4	$(0, 4)$
1	$1 + 4$	5	$(1, 5)$



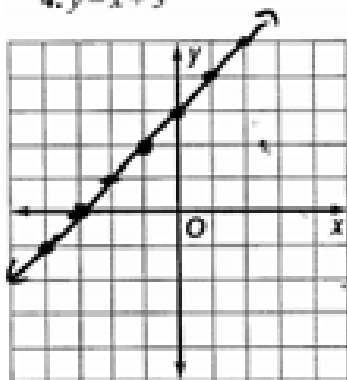
2. $y = 2x - 1$

x	$2x - 1$	y	(x, y)
-1	$2(-1) - 1$	-3	$(-1, -3)$
0	$2(0) - 1$	-1	$(0, -1)$
1	$2(1) - 1$	1	$(1, 1)$
2	$2(2) - 1$	3	$(2, 3)$

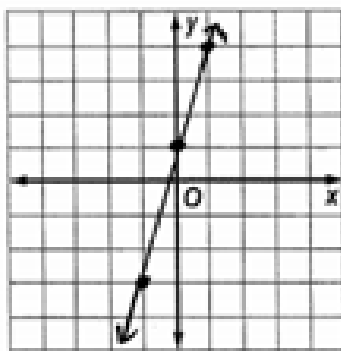


Graph each function. Make a table if it helps.

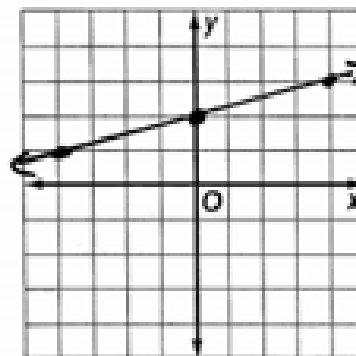
4. $y = x + 3$



5. $y = 3x + 1$



6. $y = \frac{1}{4}x + 2$

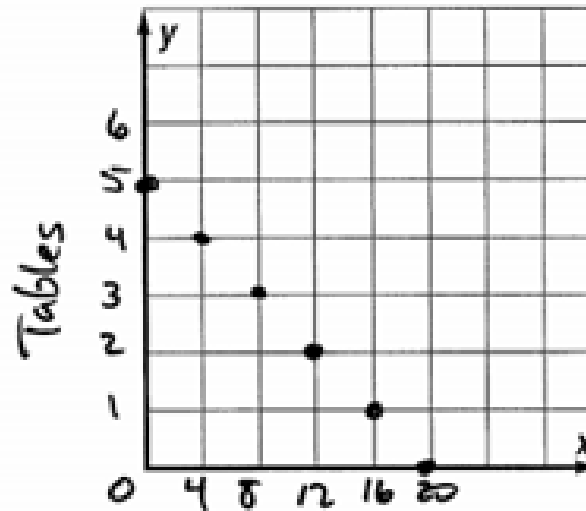


7. CARPENTRY Mrs. Valdez can assemble a chair in 1 day and a table in 4 days. Graph the function $y = 5 - \frac{1}{4}x$ to determine how many of each type of furniture Mrs. Valdez can assemble in 20 days. Is the function continuous or discrete? Explain.

Circle Answer: Discrete OR Continuous

Explanation → Can't have part of a piece of furniture

x	0	4	8	12
y	5	4	3	2



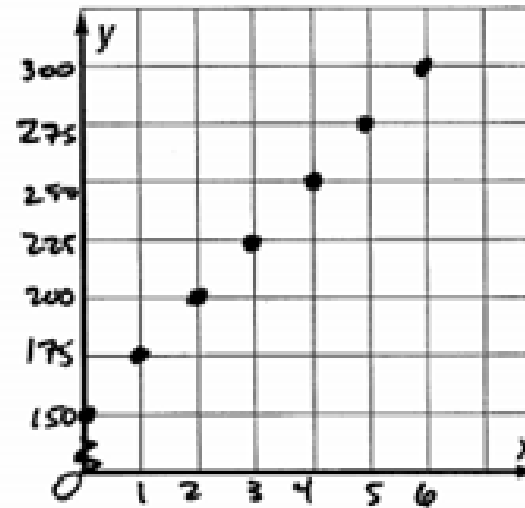
8. FITNESS A fitness center has set a goal to have 500 members. The fitness center already has 150 members and adds an average of 25 members per month. The function $f(x) = 150 + 25x$ represents the membership after x months. Graph the function to determine the number of months it will take for the fitness center to reach its membership goal. Is the function continuous or discrete? Explain.

Circle Answer: Discrete OR Continuous

Explanation → Can't have a partial member

Months

x	0	1	2	3
y	150	175	200	225



9. FUEL CONSUMPTION The function $d = 18g$ describes the distance d that Rick can drive his truck on g gallons of gasoline. Graph this function. Why is it sufficient to graph this function in the upper right quadrant only? How far can Rick drive on 2.5 gallons of gasoline?

Circle Answer: Discrete OR Continuous

Explanation → You can have a partial gallons

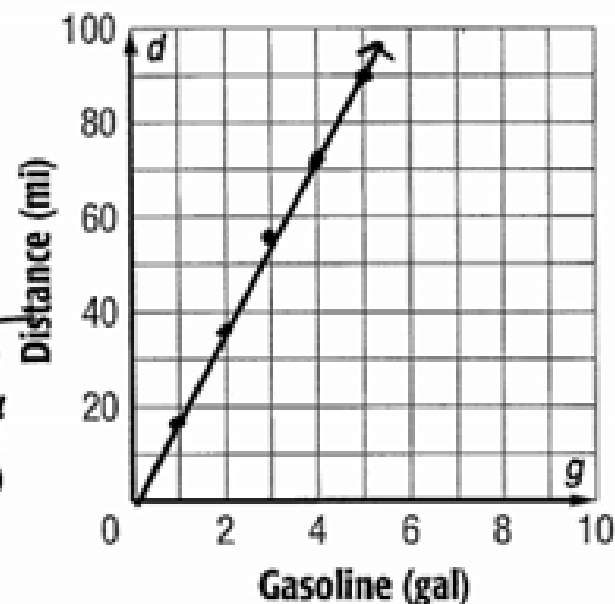
x	2	4	6	8
y	36	72	108	144

Distance Rick can drive on 2.5 gallons = 45 mi

$$d = 18(2.5)$$

$$d = 45$$

x	4
1	18
3	54
5	90



1) The table shows the total cost for a band saw and extra blades.

A) Write an equation to find the total cost c of a band saw with any number of extra blades e .

$$c = 4e + 150$$

Number of Extra Blades	Total Cost (\$)
0	150
1	154
2	158
3	162

B) Use the equation to find the cost of a band saw with 10 extra blades.

C) Use the equation to find the number of extra blades if the total cost is \$218.

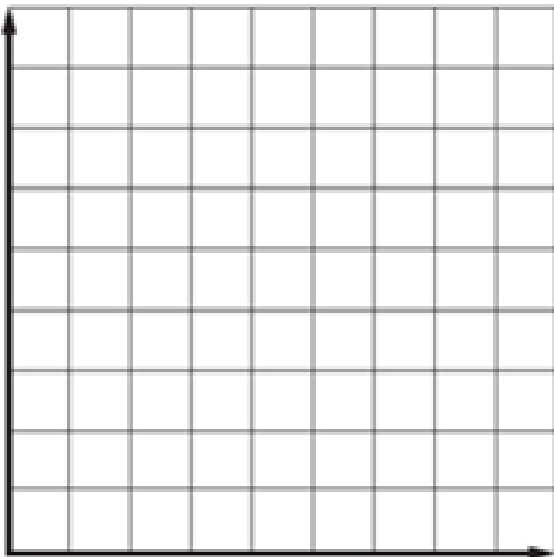
2) An aquarium costs \$85 plus \$2 per fish.

A) Write an equation to find the cost c of an aquarium plus any number of fish f .

B) Make a table to find the cost of an aquarium plus 3, 4, 5, or 6 fish.

Number of Fish	Total Cost (\$)

C) Graph the ordered pairs on the graph below. Make sure to show whether the graph is continuous or discrete. State the domain and range.



Domain: {_____}

Range: {_____}

D) Explain why the graph is either continuous or discrete.

3) Use the four given values for x to complete the following function tables Then state the domain and range of the function. Graph the function.

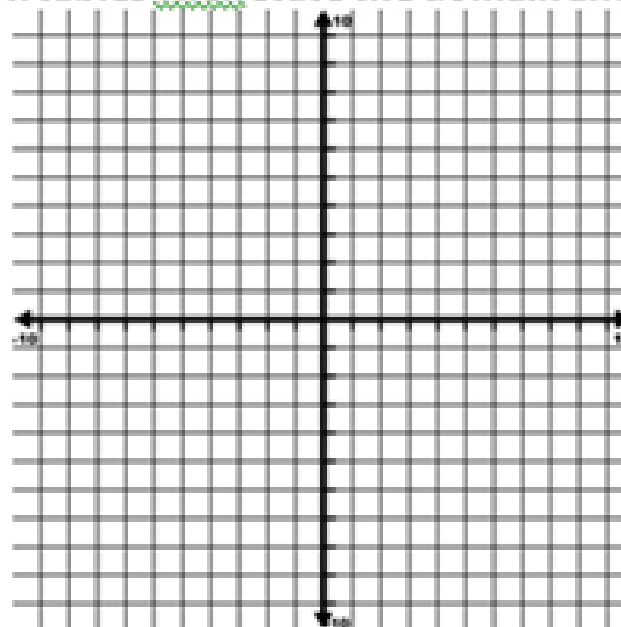
A) $f(x) = -3x + 6$

x	$-3x + 6$	$f(x)$
-1		
0		
1		
2		

Domain: { _____ }

Range: { _____ }

Numerical
Order

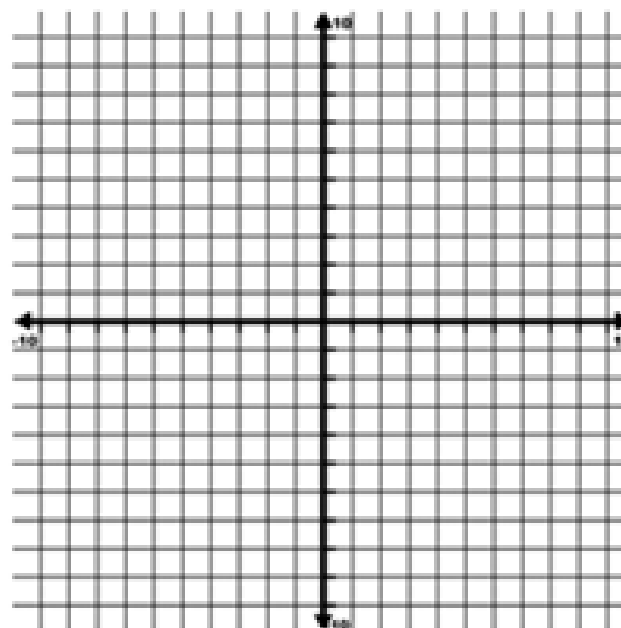


B) $f(x) = \frac{2}{3}x - 5$

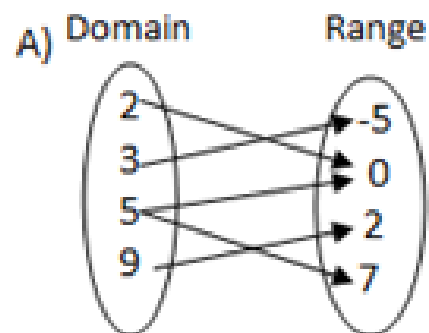
x	$\frac{2}{3}x - 5$	$f(x)$
-6		
-3		
0		
9		

Domain: { _____ }

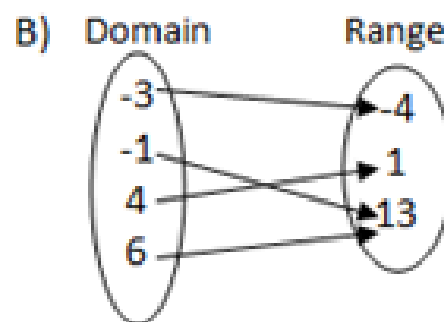
Range: { _____ }



4) Determine if the following relations in the diagrams are functions. If it is not a function, circle the domain value that proves it isn't a function.



Function? Yes or No



Function? Yes or No

5) Determine if the following relations are functions. Draw a diagram with arrows. If it is not a function, circle the domain value that proves it isn't a function.

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

Domain Range

Function? Yes or No

B) $\{(-3, 1), (8, 3), (-3, 7), (9, 4)\}$

Domain Range

Function? Yes or No

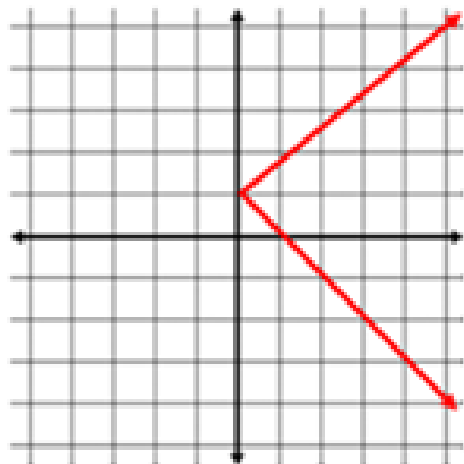
C) $\{(4, 4), (-4, 2), (2, 4), (5, 2)\}$

Domain Range

Function? Yes or No

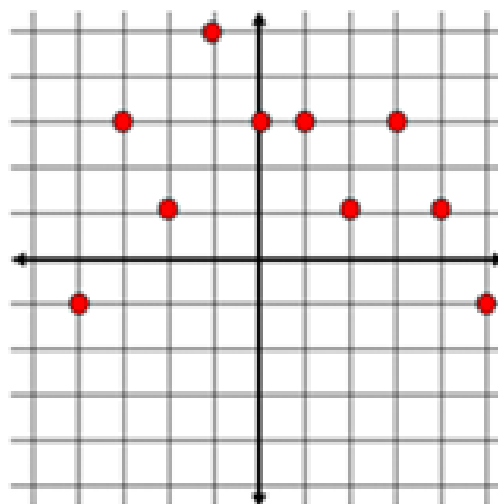
6) Determine if the following relations are functions.

A)



Function? Yes or No

B)



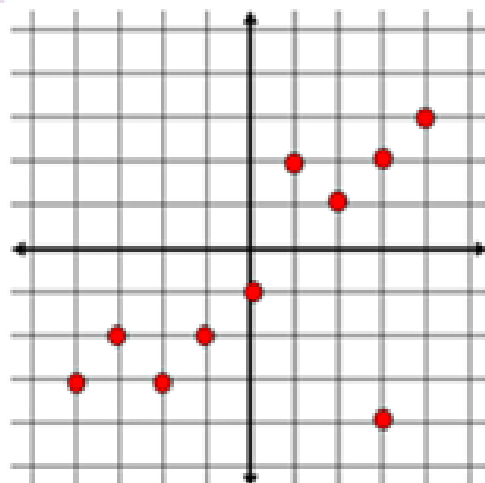
Function? Yes or No

C)



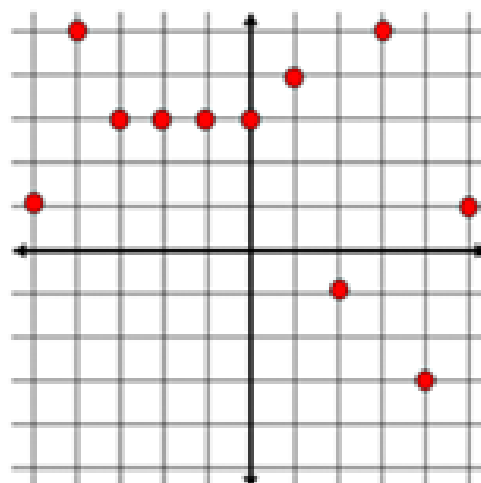
Function? Yes or No

D)



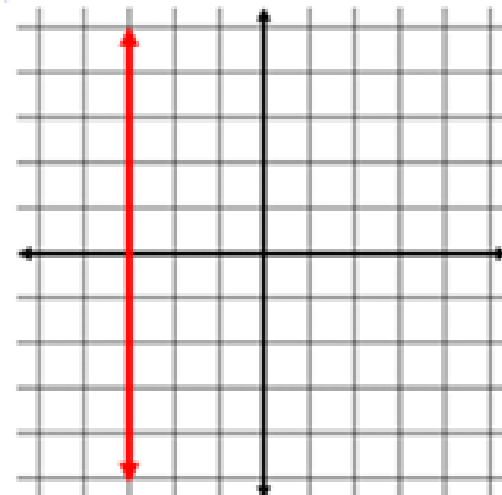
Function? Yes or No

E)



Function? Yes or No

F)



Function? Yes or No

7) A grocery store is selling ground beef for \$1.75 per pound.

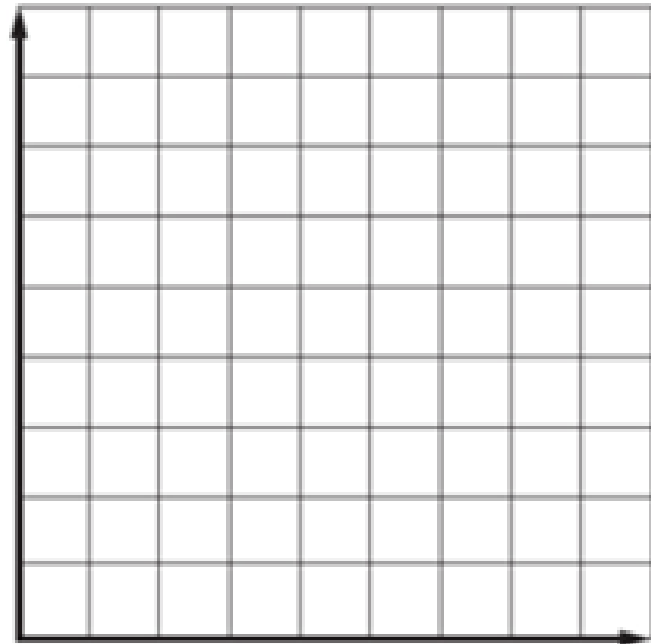
A) Write a function where the total cost $f(p)$ is a function of the pounds of ground beef bought p .

Function \rightarrow _____

B) Make a table of ordered pairs in which p represents the number of pounds and $f(p)$ represents the total cost for 1, 2, 3, or 4 pounds.

p	$f(p)$

C) Graph the ordered pairs. LABEL the graph.



D) Identify the independent and dependent variable of the relationship.

IV: _____

DV: _____

E) Is the function discrete or continuous? Explain. (Make sure your graph matches this answer)

Explanation:

F) State the domain and range of the relationship.

Domain: { _____ }

Range: { _____ }

8) A magazine has a onetime subscription fee of \$10, and then charges \$2 per magazine

A) Write a function where the cost c is a function of the number of magazines bought m .

Function \rightarrow _____

B) Make a table of ordered pairs in which m represents the number of magazines and c represents the cost for 4, 8, 12, or 16 magazines.

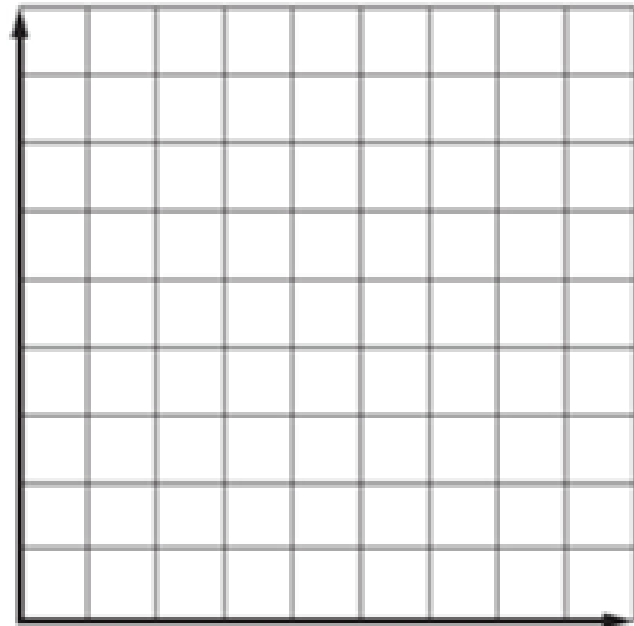
m	c

D) Identify the independent and dependent variable of the relationship.

IV: _____

DV: _____

C) Graph the ordered pairs. LABEL the graph.



E) Is the function discrete or continuous? Explain. (Make sure your graph matches this answer)

Explanation:

F) State the domain and range of the relationship.

Domain: { _____ }

Range: { _____ }