

Name _____
Mrs. Roubos

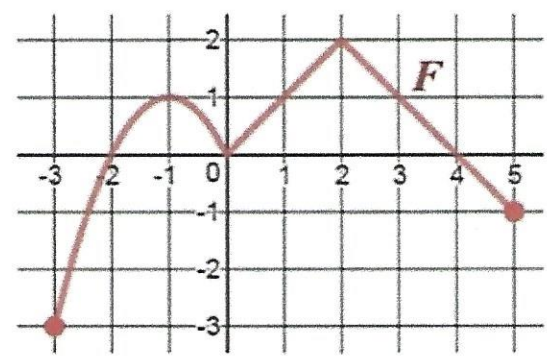
Date _____
8R Period _____

Homework Day 7

1. Mr. Smith is buying two types of gift cards to give as prizes to employees at a company meeting. He will buy restaurant gift cards that each cost \$40. He will also buy movie theater gift cards that each cost \$15. He has \$625 to buy a total of 25 gift cards. How many of each type of gift cards can Mr. Smith buy?

- 1) He can buy 11 restaurant gift cards and 14 movie theater gift cards.
- 2) He can buy 10 restaurant gift cards and 15 movie theater gift cards.
- 3) He can buy 20 restaurant gift cards and 5 movie theater gift cards.
- 4) He can buy 13 restaurant gift cards and 12 movie theater gift cards.

2. In which x-interval is the graph below linear and increasing?

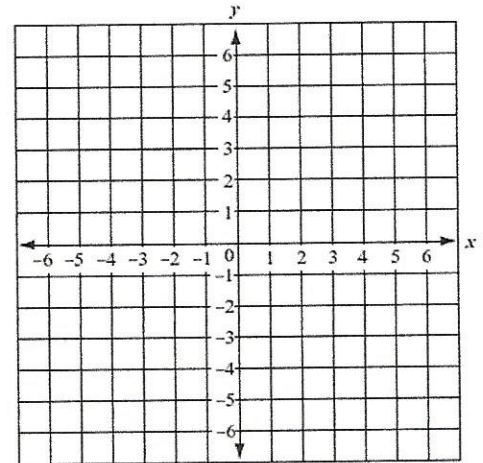


3. Between which two whole number does $\sqrt{130}$ lie on the number line?

4. Could the following represent a function? Why or why not? $\{(10,2), (6,5), (4,-3), (6,-5), (0,3)\}$?

5. The legs of a right triangle are 35 meters and 12 meters . Find the length of the hypotenuse.

6. Which of the following best represents the distance between $(-2,1)$ and $(3,5)$ on the coordinate plane? Round to the nearest tenth.



7. Which of the following is a rational number?

1) $\frac{2}{5}$

2) $\sqrt{8}$

3) $\sqrt{13}$

4) $\sqrt{26}$

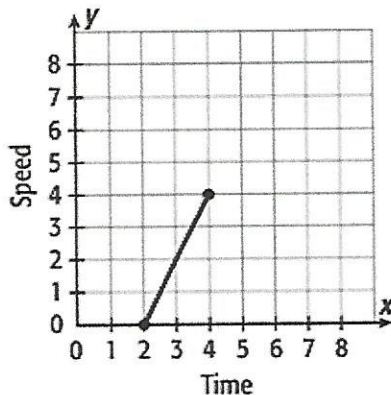
8. Which of the following is irrational?

$\frac{50}{3}$

$\sqrt{39}$

-3

9. Which statement best tells the story of the graph?



a. A car slowed down to a stop.

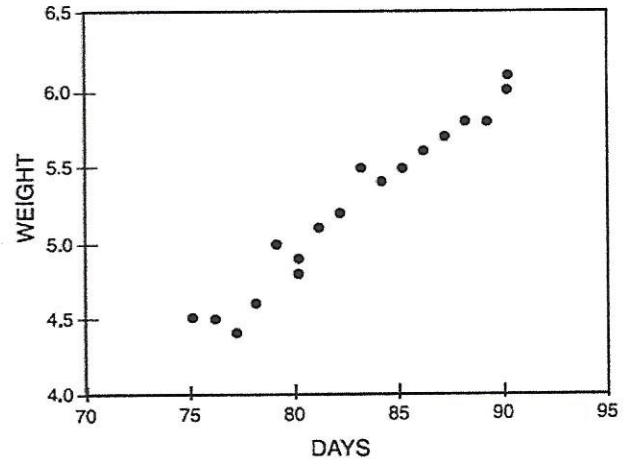
b. A car started from a stop.

c. A car maintained constant speed.

d. A car stopped and then started.

10. Max's weekly earnings are described by the equation $y = 5x + 100$, where x is the number of hours he works. If Max earned \$230 one week, how many hours did he work?

11. What relationship can be made in terms of weight? Days?



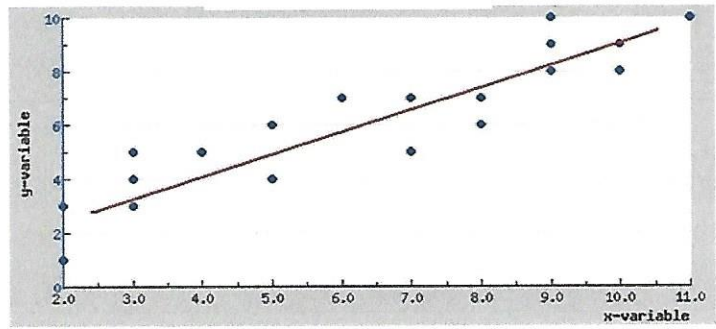
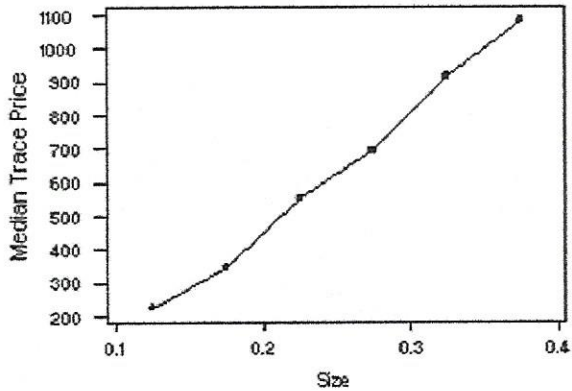
12. The table below shows how much Mary pays to rent DVDs. Create an expression that can be used to find the total cost of renting any number n of DVDs?

#	\$
2	4
4	9
6	14
8	19

13. Using the trend line, what is someone's income at 25 years of experience?



14. Which graph shows the correct line of best fit for the data ?



15. What is the relative frequency, expressed as a percent, of people who have a cat and a hamster to the total amount of people surveyed? (To the nearest whole percent)

	Cat	No Cat	Total
Hampster	56	12	68
No Hampster	32	63	95
Total	88	75	163

16. A phone company charges a one-time set-up fee and a monthly service charge. The total cost is modeled by the function $y = 15 + 60x$. Which statement represents the meaning of each part of the function?

- (1) y is the total cost, x is the number of months of service, \$15 is the installation fee, and \$60 is the service charge per month.
- (2) y is the total cost, x is the number of months of service, \$60 is the installation fee, and \$15 is the service charge per month.
- (3) x is the total cost, y is the number of months of service, \$60 is the installation fee, and \$15 is the service charge per month.
- (4) x is the total cost, y is the number of months of service, \$15 is the installation fee, and \$60 is the service charge per month.