

## Calculator Scatter Plot Practice:

X Values	Y Values
3	24
7	36
12	45
5	38
14	71
9	43

1.) Trend/Line of Best Fit:

$$Y = \underline{\hspace{2cm}}$$

Rate of Change/Slope:                     

Y-intercept:                      Circle which Association Fits the Scatterplot:

Positive    Negative    Weak    Strong    No Association

X Values	Y Values
6	25
6	11
7	42
8	11
9	6
11	46
12	15

2.) Trend/Line of Best Fit:

$$Y = \underline{\hspace{2cm}}$$

Rate of Change/Slope:                     

Y-intercept:                      Circle which Association Fits the Scatterplot:

Positive    Negative    Weak    Strong    No Association

X Values	Y Values
60	100
88	72
74	84
63	91
76	89
83	87
92	67

3.) Trend/Line of Best Fit:

$$Y = \underline{\hspace{2cm}}$$

Rate of Change/Slope:                     

Y-intercept:                      Circle which Association Fits the Scatterplot:

Positive    Negative    Weak    Strong    No Association

X Values	Y Values
4.5	21.8
12.4	32.7
9.6	43.13
-3.5	27.4
-7.9	17.9
10.1	52.3
-9.8	9

4.) Trend/Line of Best Fit:

$$Y = \underline{\hspace{2cm}}$$

Rate of Change/Slope:                     

Y-intercept:                      Circle which Association Fits the Scatterplot:

Positive    Negative    Weak    Strong    No Association

X Values	Y Values
25	50
45	79
40	70
22	48
5	28

5.) Trend/Line of Best Fit:

$$Y = \underline{\hspace{2cm}}$$

Rate of Change/Slope:                     

Y-intercept:                      Circle which Association Fits the Scatterplot:

Positive    Negative    Weak    Strong    No Association

31 The table shows the air temperatures at different elevations.

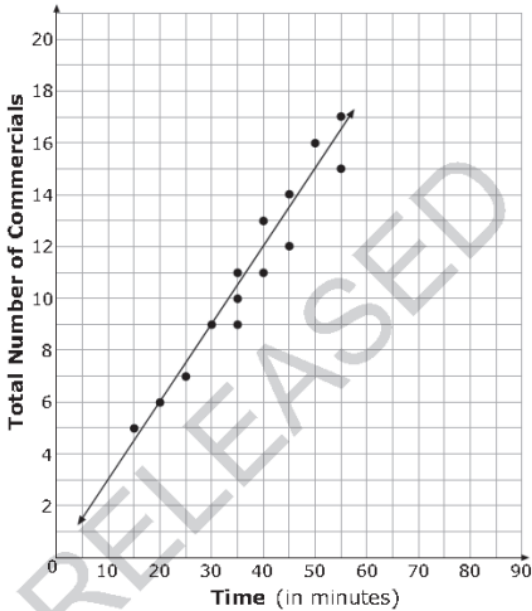
Elevation (feet)	Temperature (°F)
0	75°
100	70°
200	67°
300	64°
400	59°
500	55°
600	50°

Which line **best** fits this set of data?

- A  $y = -\frac{1}{25}x + 75$
- B  $y = \frac{1}{25}x - 75$
- C  $y = \frac{1}{25}x + 75$
- D  $y = -\frac{1}{25}x - 75$

Mary collected data each day on how many commercials she saw and how long she watched TV. She displayed her data in a scatterplot.

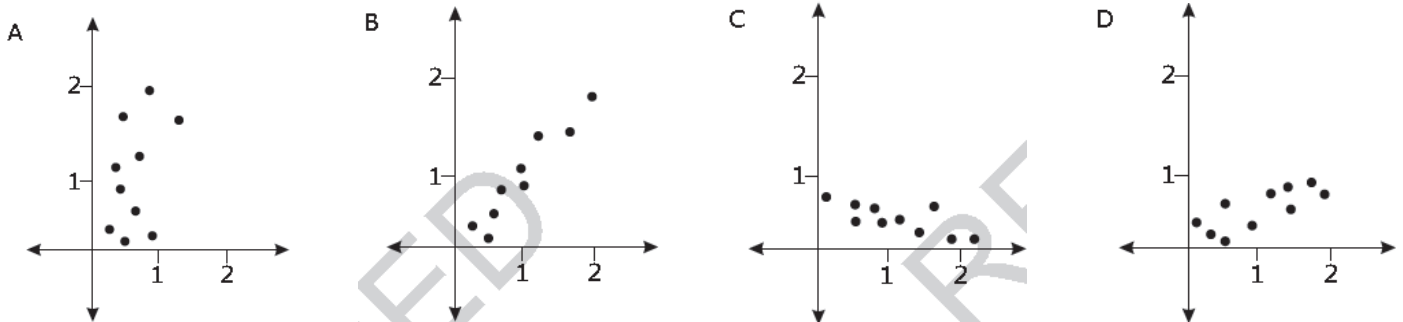
**Television Commercials**



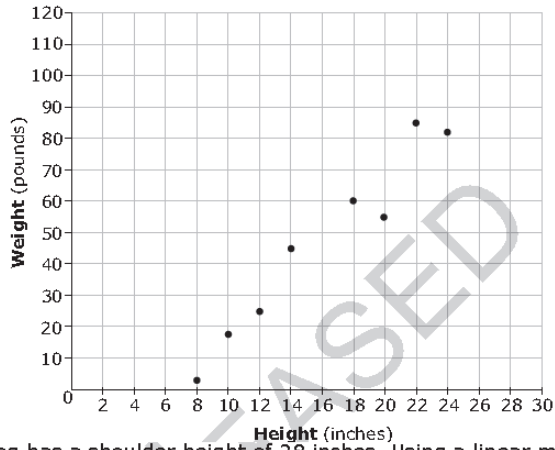
According to the trend line shown in the scatter plot, about how many commercials will Mary see if she watches TV for 1.5 hours?

- A.) 19
- B.) 27
- C.) 39
- D.) 90

James is fitting the linear equation  $y = \frac{1}{2}x$  to a data set. Which scatterplot shows the data set that the linear equation would fit best?



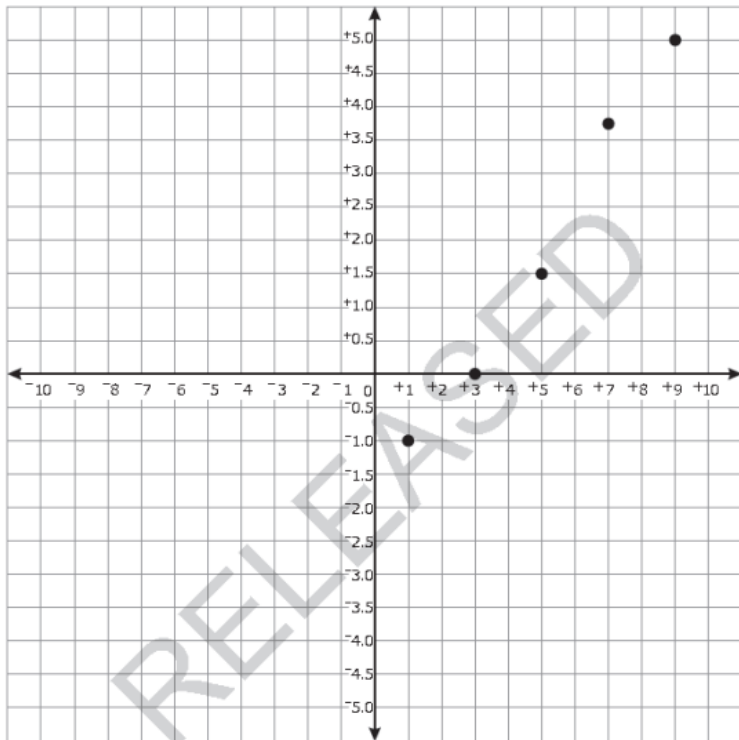
Sharon made a scatterplot comparing the shoulder heights of dogs to their weights.



Sharon’s dog has a shoulder height of 28 inches. Using a linear model, which is the *best* prediction of her dog’s weight?

- A 85 pounds
- B 90 pounds
- C 105 pounds
- D 120 pounds

50 Which equation *best* fits the data shown in the scatterplot below?



- A  $y = \frac{1}{4}x - 1$
- B  $y = \frac{1}{2}x - \frac{1}{2}$
- C  $y = \frac{3}{4}x - 2$
- D  $y = x - 3$

Which scenario would **most likely** show a negative association between the variables?

- A the height of a tree,  $x$ , and the amount of time it takes to climb to the top of the tree,  $y$
- B the number of people in the mall,  $x$ , and the number of cars in the parking lot,  $y$
- C miles traveled in a car,  $x$ , and the amount of gasoline used,  $y$
- D time spent reading a book,  $x$ , and the number of pages left to read,  $y$

Alice compared the graphs of two functions.

- The first function was  $y = 3x + 4$ .
- The second function fits the values in the table below.

$x$	$y$
2	17
5	32
8	47
11	62

What is the distance between the  $y$ -intercepts of the two functions?

- A 1
- B 2
- C 3
- D 4

Which function has a greater rate of change than the function that passes through the points given in the table below?

$x$	$y$
4	2
6	3
8	4
10	5
12	6

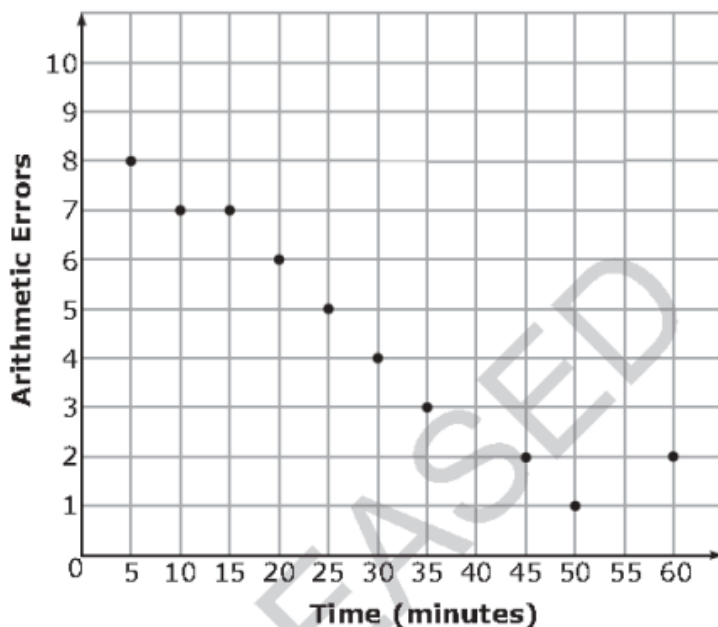
- A  $3x - 5y = 25$
- B  $7y - 3x = 14$
- C  $y = 1 + \frac{1}{2}x$
- D  $y = -1 + \frac{1}{4}x$

48 The table below shows the shoe size and age of 7 boys.

Name	Shoe Size (x)	Age (y)
Tyrone	6	9
Marcel	6	11
Patrick	7	15
Bobby	8	11
Dylan	9	15
Mike	10	16
Jonathan	12	17

**Approximately** what percent of the boys' ages is more than 1 year different from the age predicted by the line of best fit for the data?

- A 14%
  - B 29%
  - C 43%
  - D 57%
- 49 The scatterplot below shows the number of arithmetic errors 10 students made on a quiz and the amount of time the students took to complete the quiz.



Which describes the relationship between the number of arithmetic errors the students made and the amount of time the students took to complete the quiz?

- A There is a strong positive relationship between the variables.
- B There is a strong negative relationship between the variables.
- C There is a weak positive relationship between the variables.
- D There is a weak negative relationship between the variables.