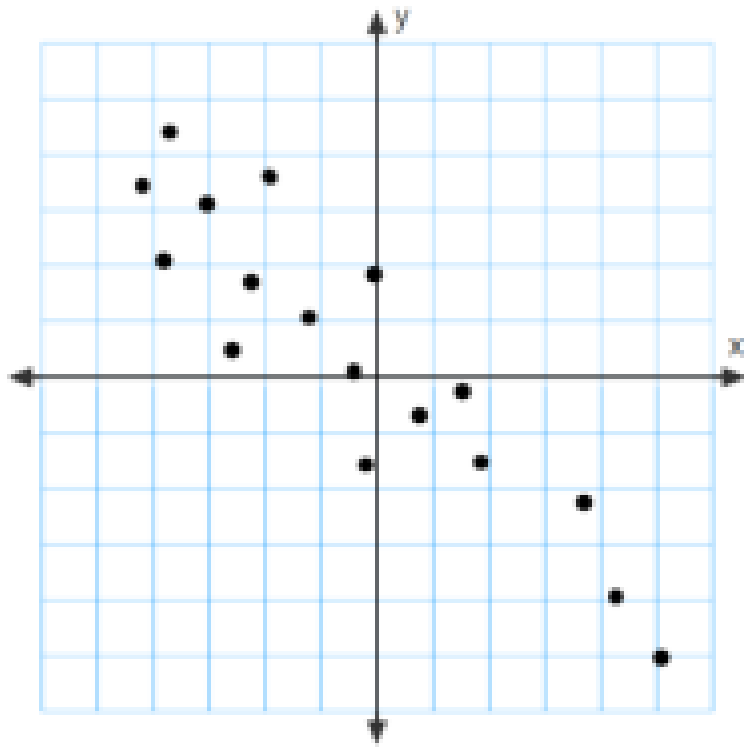
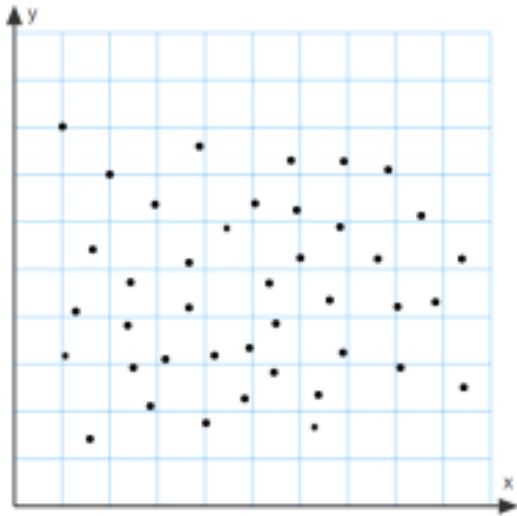


X	Y
-3.5	-2
-3	-1
-2	0.5
-1	0.5
0.5	1
1	1.5
2	2.5
3	3.5
4	3

**What is the line of best fit for the linear data above?**



**What type of correlation does the graph above have?**



What type of correlation does the graph have above?

Length of Dog	Weight in Lbs.
8	5
10	8
22	20
14	10
19	21
6	5
11	10
14	16

Calculate the line of best fit for the linear bivariate data above.

The table below displays the number of DVDs sold and rented at a store for 5 weeks.

<b>Week</b>	<b>DVDs Sold</b>	<b>DVDs Rented</b>
1	25	50
2	45	79
3	40	70
4	22	48
5	5	28

Which describes the association between the number of DVDs sold and the number of DVDs rented?

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,  $y$

The table shows the air temperatures at different elevations.

Elevation (feet)	Temperature ( $^{\circ}$ F)
0	75 $^{\circ}$
100	70 $^{\circ}$
200	67 $^{\circ}$
300	64 $^{\circ}$
400	59 $^{\circ}$
500	55 $^{\circ}$
600	50 $^{\circ}$

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

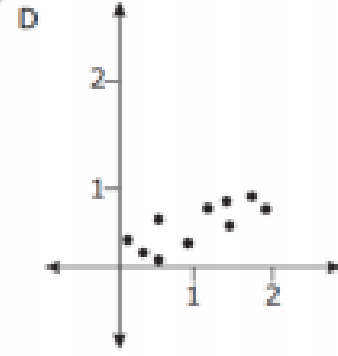
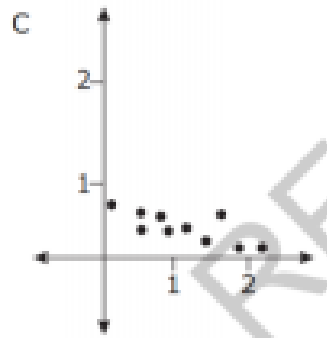
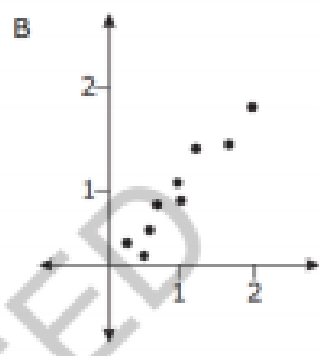
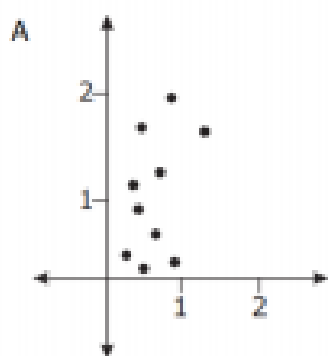
A  $y = -\frac{1}{25}x + 75$

B  $y = \frac{1}{25}x - 75$

C  $y = \frac{1}{25}x + 75$

D  $y = -\frac{1}{25}x - 75$

48 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**?





**Using the description below, what type of correlation could you expect?**

**The height of sunflowers vs the amount of rain fall**

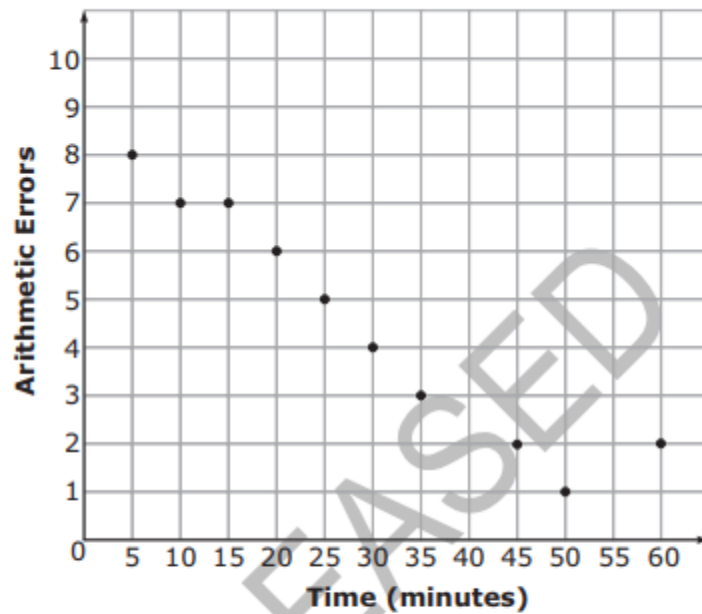
**Using the description below, what type of correlation could you expect?**

**Grade on Math Test vs. Hours playing video games**

price in dollars	number sold
11.25	53
10.50	60
12.10	30
8.45	81
9.25	70
9.75	80
7.25	120
12	37
9.99	130
7.99	100
8.75	90

**Determine the line of best fit for the data above.**

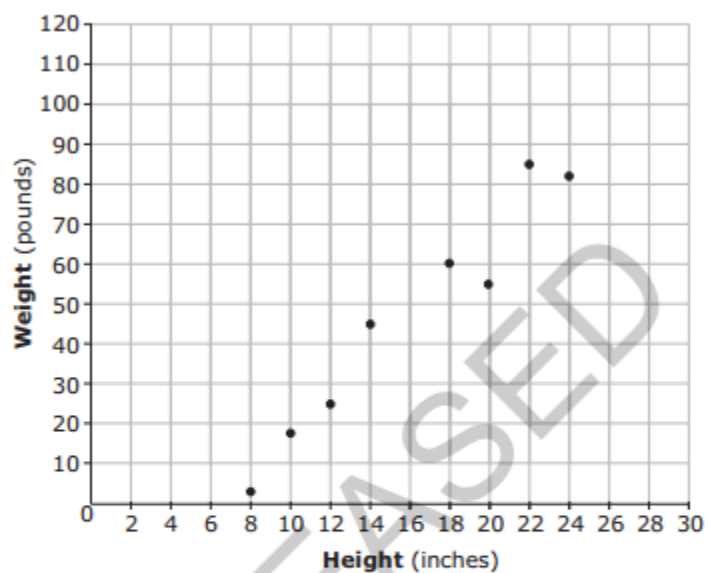
- 38 The scatterplot below shows the number of arithmetic errors 10 students made on a quiz and the amount of time the students took to complete the quiz.



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.

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

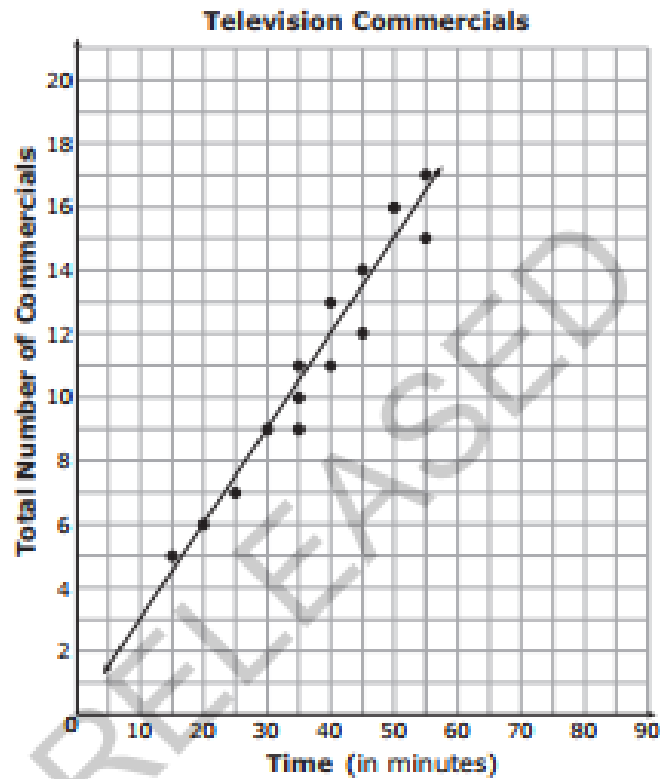
The table below displays the number of DVDs sold and rented at a store for 5 weeks.

<b>Week</b>	<b>DVDs Sold</b>	<b>DVDs Rented</b>
1	25	50
2	45	79
3	40	70
4	22	48
5	5	28

Which describes the association between the number of DVDs sold and the number of DVDs rented?

- A no association
- B weak association
- C negative association
- D positive association

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



According to the trend line shown in the scatterplot, **about** how many commercials will Mary see if she watches TV for  $1\frac{1}{2}$  hours?

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

