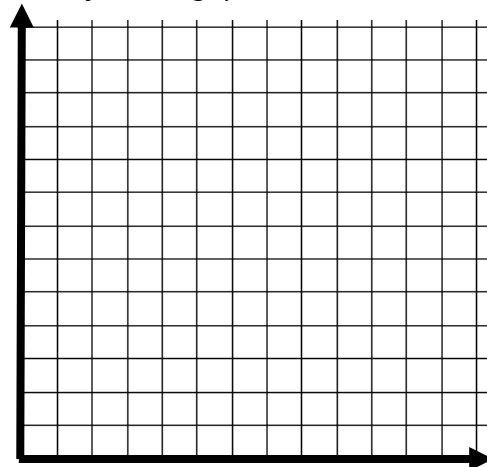


#1 - Review – Scatter Plots and Lines of Best Fit

Each day during basketball practice, Sarah keeps track of how many free throws she can make in a row. Graph the data from the table below and answer the following questions.

Days of Practice	Free throws made in a row
1	2
2	3
3	3
4	2
5	5
6	4
7	5
8	7



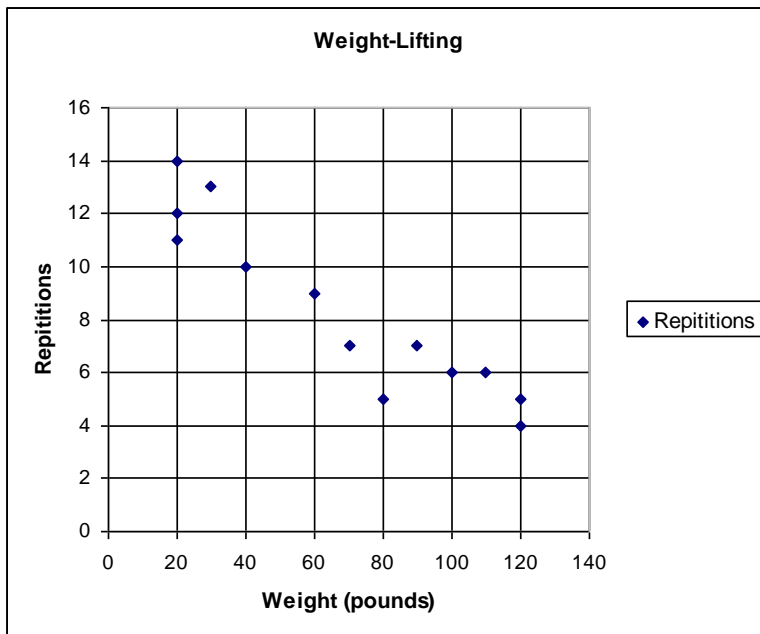
Analyzing the Scatter Plot

1. Looking at your graph, what type of correlation is represented from the data?
2. What does this correlation mean in terms of the situation? (ex. as age increases, so does height)
3. Are there any outliers in the data?
4. **Draw a line of best fit on the graph that approximates the trend in the data**
5. Using your knowledge of slope as rise over run, calculate the slope of your line of best fit
 $m =$
6. What does the slope of the line represent in the situation?
7. Looking at your line of best fit, approximate its y-intercept.
 $b =$
8. Write the equation of the line of best fit using slope-intercept form $y = mx + b$
9. Using your equation, predict how many free throws she could make in a row after 10 days of practicing

#2 - Review – Scatter Plots and Lines of Best Fit

Each day during after school David lifts weights. The number of repetitions he can do for each weight is show below on the graph.

Weight	Repetitions
20	11
20	12
20	14
30	13
40	10
60	9
70	7
80	5
90	7
100	6
110	6
120	5
120	4



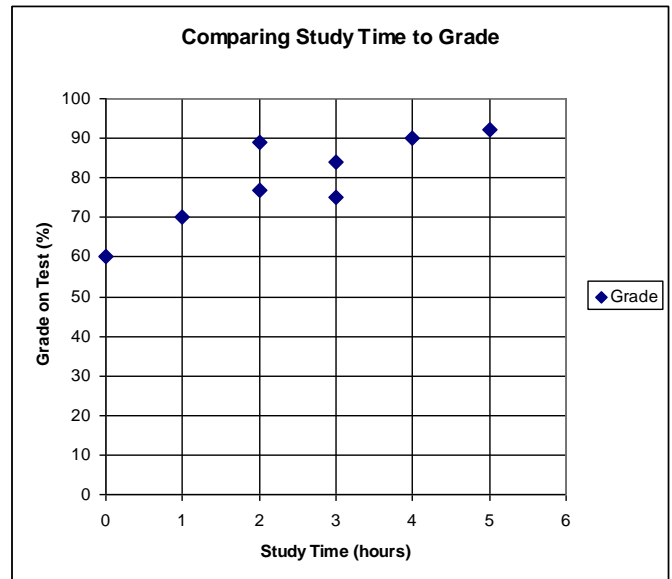
Analyzing the Scatter Plot

1. Looking at your graph, what type of correlation is represented from the data?
2. What does this correlation mean in terms of the situation? (ex. as age increases, so does height)
3. Are there any outliers in the data?
4. **Draw a line of best fit on the graph that approximates the trend in the data**
5. Using your knowledge of slope as rise over run, calculate the slope of your line of best fit
 $m =$
6. What does the slope of the line represent in the situation?
7. Looking at your line of best fit, approximate its y-intercept.
 $b =$
8. Write the equation of the line of best fit using slope-intercept form $y = mx + b$
9. Using your equation, predict how many repetitions he could do if he was lifting 140 pounds of weight?

#3 - Review – Scatter Plots and Lines of Best Fit

The table at the left gives the number of hours spent studying for a science test and the scores on the test. A graph of the data is shown to the right.

Study Hours	Grade
3	84
2	77
5	92
1	70
0	60
4	90
3	75
2	89



Analyzing the Scatter Plot

1. Looking at your graph, what type of correlation is represented from the data?
2. What does this correlation mean in terms of the situation? (ex. as age increases, so does height)
3. Are there any outliers in the data?
4. **Draw a line of best fit on the graph that approximates the trend in the data**
5. Using your knowledge of slope as rise over run, calculate the slope of your line of best fit

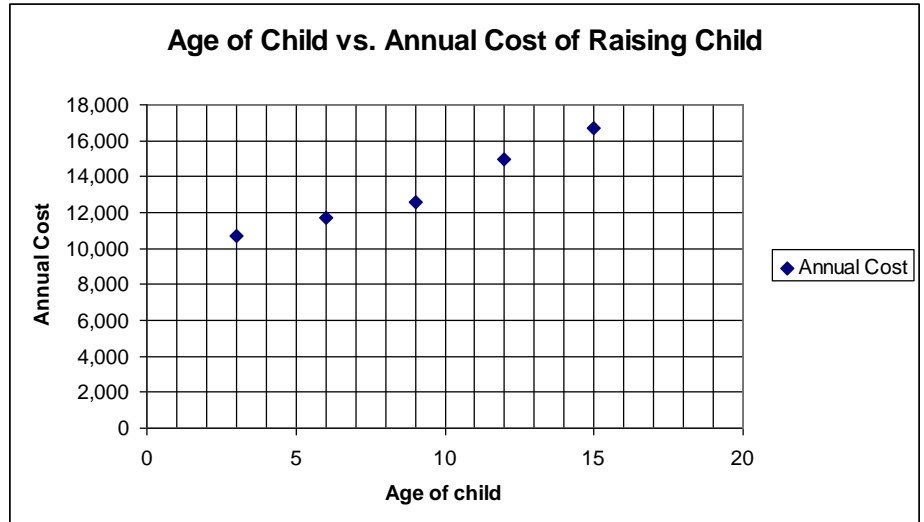
$$m =$$

6. What does the slope of the line represent in the situation?
 7. Looking at your line of best fit, approximate its y-intercept.
- $$b =$$
8. Write the equation of the line of best fit using slope-intercept form $y = mx + b$
 9. Using your equation, predict what grade someone would have scored if they studied 6 hours.

#4 - Review – Scatter Plots and Lines of Best Fit

The table at the left shows the predicted annual cost for a middle income family to raise a child from birth until adulthood. The graph of the data is on the right.

Child's Age	Annual Cost
3	10,700
6	11,700
9	12,600
12	15,000
15	16,700



Analyzing the Scatter Plot

1. Looking at your graph, what type of correlation is represented from the data?
2. What does this correlation mean in terms of the situation? (ex. as age increases, so does height)
3. Are there any outliers in the data?

4. Draw a line of best fit on the graph that approximates the trend in the data

5. Using your knowledge of slope as rise over run, calculate the slope of your line of best fit

$$m =$$

6. What does the slope of the line represent in the situation?

7. Looking at your line of best fit, approximate its y-intercept.

$$b =$$

8. Write the equation of the line of best fit using slope-intercept form $y = mx + b$

9. Using your equation, predict how much it would cost to raise a child who is 17 years old.