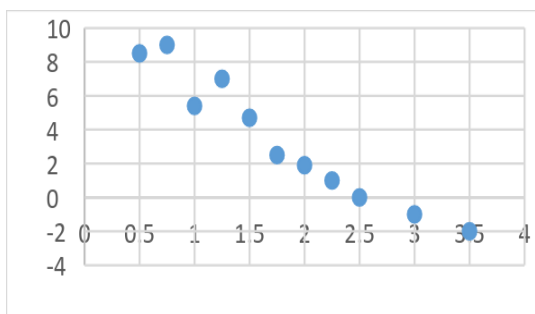
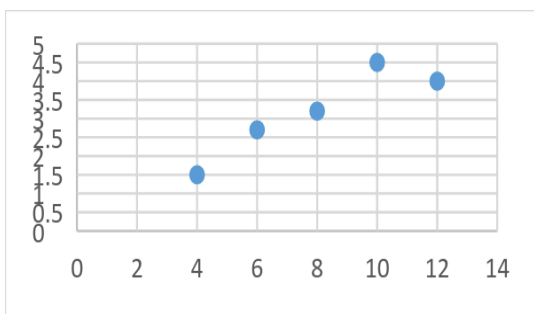


## Linear Regression Pre-Quiz

*Instructions:* Answer all questions. You will use all these skills during the activity.

1. Define “line of best fit”:

2. Draw a line of best fit for the following scatter plots:



3. Find the equation of the line through the following points:

a.  $(-1, -10)$  and  $(3, 2)$

b.  $(2, 5)$  and  $(-4, 2)$

4. A ball is rolled down a hallway and its position is recorded at five different times. Use the data in the table below to predict the location of the ball at 12 seconds.      Answer:

Time (seconds)	Position (meters)
1	9
2	12
4	17
6	21
8	26

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Class: \_\_\_\_\_

5. Calculate the average speed of the ball in question 4. Show your work.

6. A car accelerates from a standstill to 60 m/s in 10 seconds. What is the acceleration?

7. A car accelerates from 25 km/hr to 55 km/hr in 30 seconds. What is its acceleration?