Lesson 2 Reteach

Lines of Best Fit
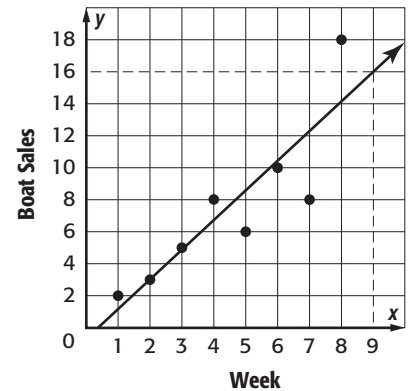
Examples

BOATS Boat sales at Dustin's Marina are given.

Week	1	2	3	4	5	6	7	8
Boat Sales	2	3	5	8	6	10	8	18

1. **Construct a scatter plot using the data. Then draw and assess a line that seems to best represent the data.**
   Graph each of the data points. Draw a line that fits the data.

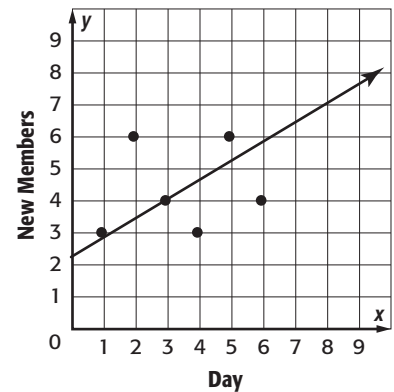2. **Use the line of best fit to make a conjecture about boat sales in week 9.**
   Extend the line so that you can estimate the *y*-value for an *x*-value of 9. The *y*-value for the 9th week is 16 boats. We can predict that Dustin's Marina will sell 16 boats in week 9.

Exercises

1. **OUTDOOR CLUB** The table shows the number of new members to join the Outdoor Club.

Day	1	2	3	4	5	6
New Members	3	6	4	3	6	4

   a. Construct a scatter plot of the data. Then draw and assess a line that seems to best represent the data.

   b. Use the line of best fit to make a conjecture about the number of new members to join the club on the eighth day. **Sample answer: 7 new members**

2. **PORTFOLIO** The table shows the value of Heather's portfolio, in thousands of dollars, at the end of each year.

Year	1	2	3	4	5	6
Value	90	70	80	60	80	60

   a. Construct a scatter plot of the data. Then draw and assess a line that seems to best represent the data.

   b. Use the line of best fit to make a conjecture about the value of Heather's portfolio at the end of year 8.
   Sample answer: $55,000