NAME

Module 19 Analyzing Data and Statistics
Lesson 4 Finding a Line of Best Fit

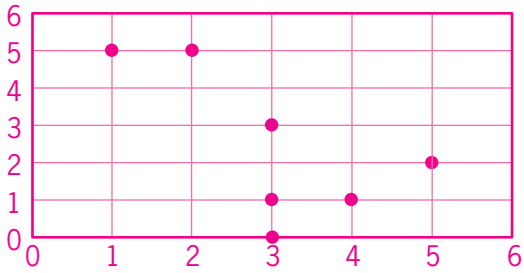
additional practice

For each set of data, make a scatter plot. Then, indicate whether the graph indicates a positive correlation, a negative correlation, or no correlation.

1. Jack played mini-golf each day last summer. The table shows the number of games he played and the number of holes-in-one he shot for eight days.

Games	Holes-in-one	Games	Holes-in-one
3	0	4	1
2	5	3	3
1	5	2	5
3	1	5	2

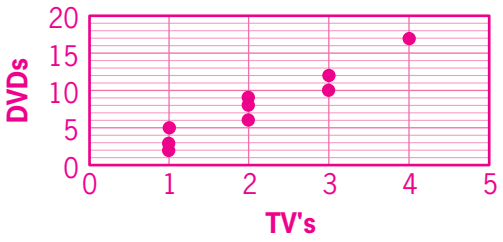
The scatter plot represents a negative correlation. As the number of games increase, the number of holes-in-one decrease.



2. Linda surveyed her classmates about the number of TV's owned by their families and the number of DVD movies owned.

TV's	DVD's	TV's	DVD's
4	17	2	6
3	12	1	2
2	8	3	10
1	3	2	9
2	8	1	5

The scatter plot indicates a positive correlation between the number of TV's owned by a family and the number of DVD movies owned.



3. Use the scatter plot shown to write the equation of the line of fit passing through points (4, 20) and (8, 90).

Slope: 17.5; $y = 17.5x - 50$

4. Use the line of fit found in Problem 3 to predict the number of drinks that will be sold when the ticket price is $9.50.

About 116 drinks

5. Use the scatter plot shown to write the equation of the line of fit. Use the points (2, 80) and (4, 65) to find the equation.

Slope: –7.5; $y = -7.5x + 95$

6. Use the line of fit found in Problem 5 to predict the Chapter Test score for a student who missed six homework assignments.

$y = 50$; According to the line of fit model, a student who misses six homework assignments will score a 50 on the Chapter Test.