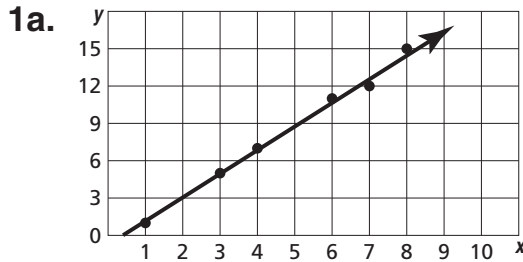## 2-5 Skills Practice

Scatter Plots and Lines of Regression

For Exercises 1–3, complete parts a–c.

a. Make a scatter plot and a line of fit, and describe the correlation.
b. Use two ordered pairs to write a prediction equation.
c. Use your prediction equation to predict the missing value.

1.

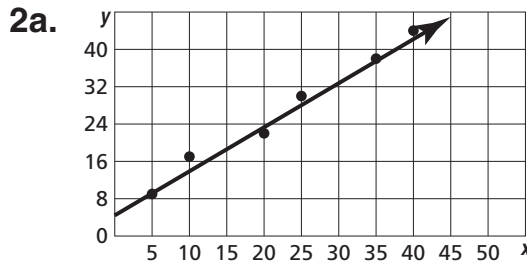| x	y
1	1
3	5
4	7
6	11
7	12
8	15
10	?

1a.

Positive Correlation

1b. Sample answer using (1, 1) and (8, 15): $y = 2x - 1$
1c. Sample answer: 19

2.

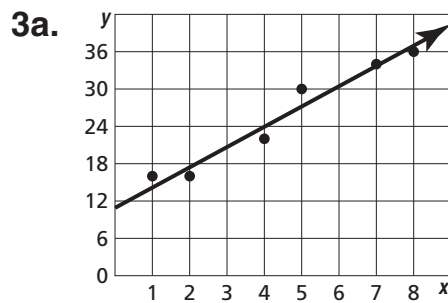| x	y
5	9
10	17
20	22
25	30
35	38
40	44
50	?

2a.

Positive Correlation

2b. Sample answer using (5, 9) and (40, 44): $y = x + 4$
2c. Sample answer: 54

3.

x	y
1	16
2	16
3	?
4	22
5	30
7	34
8	36

3a.

Positive Correlation

3b. Sample answer using (2, 16) and (7, 34): $y = 3.6x + 8.8$
3c. Sample answer: 19.6