

4.5**Practice A**

In Exercises 1 and 2, use residuals to determine whether the model is a good fit for the data in the table. Explain.

1. $y = \frac{7}{2}x - 8$

x	-4	-3	-2	-1	0	1	2	3	4
y	-21	-19	-15	-12	-8	-4	-1	2	6

2. $y = -4x + 27$

x	1	2	3	4	5	6	7	8	9
y	24	22	19	18	15	11	9	6	5

In Exercises 3 and 4, use a graphing calculator to find an equation of the line of best fit for the data. Identify and interpret the correlation coefficient.

3.

x	1	2	3	4	5	6	7	8	9
y	-7	-4	-1	0	0	1	4	7	9

4.

x	-5	-3	-1	1	3	5	7	9	11
y	20	18	15	14	12	9	7	4	2

5. The table shows the number of people x in a room and the temperature in the room in degrees Fahrenheit, y .

x	0	1	2	3	4	5	6	7	8
y	76	76	77	77	78	79	79	80	82

- Use a graphing calculator to find an equation of the line of best fit.
- Identify and interpret the correlation coefficient.
- Interpret the slope and y -intercept of the line of best fit.
- Approximate the temperature when 15 people are in the room.