Answer Key

Lesson 5.5

Practice Level B

1.
$$y - 7 = 5(x - 4)$$
 2. $y + 2 = \frac{2}{3}(x - 3)$

3.
$$y - 1 = -4(x + 6)$$
 4. $y + 5 = 6(x + 5)$

5.
$$y + 8 = -2x$$
 6. $y - 11 = \frac{1}{2}(x + 9)$

7.
$$y + 1 = -\frac{1}{3}(x - 1)$$
 8. $y = -\frac{3}{2}(x - 5)$

9.
$$y + 7 = 5(x - 3)$$
 10. $y - 2 = -\frac{1}{2}(x + 9)$

11.
$$y + 11 = -\frac{5}{2}(x - 10)$$
 12. $y + 8 = \frac{3}{8}(x + 4)$

13. Lines b and c are perpendicular. **14.** Lines a and b and lines b and c are perpendicular. Lines a and c are parallel. **15.** Lines a and b and lines b and c are perpendicular. Lines a and c are parallel.

16. a.
$$y = \frac{2}{3}x + 4$$
 b. $y = -\frac{4}{3}x + 4$ **c.** No. The

lines for part A and part B are not perpendicular.

17. a. you:
$$y = \frac{1}{2}x$$
; your friend: $y = \frac{1}{2}x + 5$

b. you: 10 sandwiches; your friend: 15 sandwiches

c. The graphs are parallel because they have the same slope but different *y*-intercepts.