

Paper Practice 5.1**Writing Equations in Slope-Intercept Form**

Write an equation of the line that passes through the given point and has the given slope.

1. $(10, -4)$; slope $-\frac{2}{5}$

2. $(-3, -1)$; slope $\frac{5}{3}$

3. $(3, 5)$; slope 4

4. $(-4, 5)$; slope $-\frac{2}{3}$

5. In 2010, the average price of a movie ticket was \$7.89. Since then, the price has increased by an average of \$0.15 per year. Write a linear equation to represent the cost C of a movie ticket y years after 2010.

6. On a trip, Miguel drives at an average speed of 55 miles per hour. After 2 hours, the odometer on his car reads 4583. Write an equation to represent the reading on the odometer m after h hours.

Write an equation of the line that passes through each pair of points.

9. $(-5, 1), (0, -3)$

10. $(-4, -6), (5, -6)$

11. $(-2, -4), (5, 1)$

12. $(4, -7), (4, 0)$

13. $(0, -5), (6, -6)$

14. $(-6, 2), (10, 0)$

15. A pack of 10 yoga classes costs \$124. A pack of 15 yoga classes costs \$172. Write a linear equation to find the total cost C for x yoga classes.

16. Forensic scientists can estimate the overall height of an adult male based on the length of the femur bone. A femur bone that is 18 inches long results in an estimated overall height of 65.85 inches. A femur bone that is 14 inches long results in an estimated overall height of 58.33. Write a linear equation to represent the overall height of an adult male h based on the length of his femur bone f .