Lesson 5.6 Practice: Parallel and Perpendicular Lines

School Launch · Algebra I · Unit 5: Linear Functions · Worksheet A

No calculator

Name _____ Date _____ Score _____ / 10

Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, write the equation, solve, and answer in a sentence with units.

1. Write the equation of the line through $(5, -1)$ that is perpendicular to $y = \frac{1}{2}x + 7$. EASY

2. Write the equation of the line through $(4, 2)$ that is parallel to $y = -4x$. EASY

3. Write the equation of the line through $(5, 6)$ that is parallel to $y = x - 1$. EASY

4. Write the equation of the line through $(5, 2)$ that is perpendicular to $y = \frac{3}{4}x$. MEDIUM

5. Write the equation of the line through $(0, 1)$ that is parallel to $y = -x + 8$. MEDIUM

6. Write the equation of the line through $(4, 0)$ that is parallel to $y = \frac{2}{3}x - 5$. MEDIUM

7. Write the equation of the line through $(-5, 6)$ that is perpendicular to $y = \frac{1}{2}x - 8$. MEDIUM

8. Write the equation of the line through $(-4, -2)$ that is perpendicular to $y = -\frac{3}{2}x + 2$. HARD

9. Write the equation of the line through $(6, 1)$ that is perpendicular to $y = -\frac{2}{3}x + 8$. HARD

10. Write the equation of the line through $(5, -4)$ that is parallel to $y = \frac{1}{2}x$. HARD