

Name _____
Date _____

Math 2

Parallel & Perpendicular Lines Worksheet

Determine which lines, if any, are parallel or perpendicular, for each group of lines.

1. Line A: $y = \frac{3}{4}x + 2$ Line B: $4x - 3y = -3$ Line C: $3x - 4y = 20$

2. Line D: $x - 2y = 4$ Line E: $2x + y = 0$ Line F: $x + 2y = 3$

3. Line G: $5x + 7y = 7$ Line H: $y = \frac{7}{5}x + 3$ Line I: $7x - 5y = 2$

Write an equation of the line that passes through the given point and is *parallel* to the given line.

4. $(-3, -1)$; $y = \frac{4}{3}x + 1$

5. $(-8, 5)$; $y = -\frac{1}{4}x - 2$

6. $(2, 3)$; $y = -6x + 4$

7. $(2, 0)$; $y = \frac{3}{2}x - 7$

8. $(-6, 4)$; $y = -\frac{2}{3}x + 3$

9. $(-5, -2)$; $y = 2x - 9$

Write an equation of the line that passes through the given point and is *perpendicular* to the given line.

10. $(-3, -2)$; $y = \frac{3}{2}x + 2$

11. $(-6, 1)$; $y = -\frac{3}{4}x - 1$

12. $(2, 5); y = -8x + 3$

13. $(4, 0); y = \frac{1}{3}x - 4$

14. $(4, 6); y = -\frac{2}{3}x + 3$

15. $(-8, -2); y = 2x - 6$