Name: _____

MATH MONKS

Equations of Lines Worksheet

Find the equation of the line with the given slope and y-intercept

1. Slope = 9 ; y-intercept = 2

2. Slope = 9 ; y-intercept = $-\frac{7}{2}$

3. Slope = 4 ; y-intercept = -2

4. Slope = -4 ; y-intercept = $-\frac{7}{2}$

Write the slope-intercept form of the equation of the line described

5. through (-1, -1)
   parallel to $y = -2x - 4$

6. through (5, -1)
   perpendicular to $y = \frac{1}{3}x + 1$

7. through (5, 4)
   perpendicular to $y = -8x$

8. through (-4, 3)
   parallel to $y = \frac{1}{2}x - 3$

Write the slope-intercept form of the equation of each line

9. $y + 1 = 3(x + 2)$

10. $x - 4y = 0$

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Equations of Lines Worksheet

Answers

1. Slope = 9 ; y-intercept = 2

$y = 9x + 2$

2. Slope = 9 ; y-intercept = $-\frac{7}{2}$

$y = 9x - \frac{7}{2}$

3. Slope = 4 ; y-intercept = -2

$y = 4x - 2$

4. Slope = -4 ; y-intercept = $-\frac{7}{2}$

$y = -\frac{7}{2}x - 4$

5. through (-1, -1)
parallel to $y = -2x - 4$

$y = -2x - 3$

6. through (5, -1)
perpendicular to $y = \frac{1}{3}x + 1$

$y = \frac{1}{3}x - \frac{8}{3}$

7. through (5, 4)
perpendicular to $y = -8x$

$y = \frac{1}{8}x + \frac{27}{8}$

8. through (-4, 3)
parallel to $y = \frac{1}{2}x - 3$

$y = \frac{1}{2}x + 5$

9. $y + 1 = 3(x + 2)$

$y = 3x + 5$

10. $x - 4y = 0$

$y = \frac{x}{4}$