Finding Linear Equations – Student Worksheet

Find the equation of each line described.

1.3 The line passes through (1, 8) and (5, 3). $y = -1.25x + 9.25$

1.4 The line passes through (-7, -1) and (5, 5) $y = 0.5x + 2.5$

1.6 The line with slope -0.7 passes through the point (-4, -5). $y = -0.7x + 2.2$

1.7 The line with slope $\dfrac{1}{3}$ passes through the point (0, 3). $y = \dfrac{1}{3}x + 3$

1.8 The line with slope 0 passes through the point (-6, 2). $y = 2$

1.10 The line passing through (3, 0) that is parallel
    to the line that passes through (-7, 0) and (0, 5). $y = \dfrac{5}{7}x - \dfrac{15}{7}$

1.11 The line parallel to y = 0.5x + 3 that passes through (-7, 2). $y = 0.5x + 5.5$

1.13 The line passing through (3, 5) that is perpendicular
    to the line that passes through (-7, 2) and (5, 1). $y = 4x - 7$

1.14 The line perpendicular to
    $y = \dfrac{8}{5}x + \dfrac{9}{5}$ that passes through (-3, -3). $y = \dfrac{-5}{8}x - \dfrac{39}{8}$

1.15 The line passing through (4, -3) that is perpendicular
    to the line that passes through (-5, 5) and (-5, 2). $y = -3$

1. Which line(s) are parallel to $5x + 2y = 9$?   Mark all correct answers.

A. $y = -2.5x + 7$ B. $5x + 2y = 0$
C. $2x + 5y = 10$ D. $5x + 5y = 7$
E. $5y = 2x$ F. $2x - 5y = 12$

2. Which line is parallel to $5x + 2y = 9$ and passes through the origin.

A. $y = -2.5x + 7$ B. $5x + 2y = 0$
C. $2x + 5y = 10$ D. $5x + 5y = 7$
E. $5y = 2x$ F. $2x - 5y = 12$

3. Which line(s) are perpendicular to $5x + 2y = 9$?   Mark all correct answers.

A. $y = -2.5x + 7$ B. $5x + 2y = 0$
C. $2x + 5y = 10$ D. $5x + 5y = 7$
E. $5y = 2x$ F. $2x - 5y = 12$

4. Which line is perpendicular to $5x + 2y = 9$ and passes through the origin?
A. $y = -2.5x + 7$ B. $5x + 2y = 0$
C. $2x + 5y = 10$ D. $5x + 5y = 7$
E. $5y = 2x$ F. $2x - 5y = 12$

5. Which of the following line(s) are parallel to $y = 7$? Mark all correct answers.

A. $y = 9$ B. $x = 0$
C. $x = 7$ D. $y = x$

6. Which of the following line(s) are perpendicular to $y = 7$? Mark all correct answers.

A. $y = 9$ B. $x = 0$
C. $x = 7$ D. $y = x$