Finding Linear Equations – Student Worksheet

Find the equation of each line described.

1.3 The line passes through (1, 8) and (5, 3).

1.4 The line passes through (-7, -1) and (5, 5)

1.6 The line with slope -0.7 passes through the point (-4, -5).

1.7 The line with slope $\frac{1}{3}$ passes through the point (0, 3).

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

1.10 The line passing through (3, 0) that is parallel to the line that passes through (-7, 0) and (0, 5).

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

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

1.14 The line perpendicular to

$$y = \frac{8}{5}x + \frac{9}{5}$$
 that passes through (-3, -3).

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

- 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
- $B. \quad 5x + 2y = 0$
- 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