GSE Coordinate Algebra Name_____

Graphing Parallel and Perpendicular Lines

Date_____ Period____

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

1) through: $(5, 2)$, parallel to $y = \frac{4}{5}x$

2) through: $(-3, 3)$, parallel to $y = -\frac{7}{3}x + 2$

3) through: $(-2, -2)$, parallel to $y = \frac{5}{2}x + 1$

4) through: $(-4, 2)$, parallel to $y = \frac{3}{4}x + 2$

5) through: $(-2, -2)$, parallel to $y = -\frac{3}{7}x + 2$

6) through: $(2, -3)$, parallel to $y = -x - 4$

7) through: $(-4, -1)$, parallel to $x = 0$

8) through: $(5, 0)$, parallel to $y = -\frac{4}{5}x - 5$

9) through: $(1, 0)$, parallel to $y = -\frac{1}{4}x + 4$

10) through: $(3, -4)$, parallel to $y = -4x + 3$

11) through: $(-1, 4)$, perp. to $y = \frac{1}{2}x + 1$

12) through: $(5, -2)$, perp. to $y = \frac{5}{7}x - 2$

13) through: $(5, -2)$, perp. to $x = 0$

14) through: $(1, 2)$, perp. to $y = -x + 4$

15) through: $(3, 2)$, perp. to $y = -\frac{3}{7}x + 5$

16) through: $(-2, 5)$, perp. to $y = \frac{2}{7}x + 3$

17) through: $(2, -2)$, perp. to $y = 5$

18) through: $(-4, 0)$, perp. to $y = -4$

19) through: $(-2, -2)$, perp. to $y = 2x - 2$

20) through: $(2, -4)$, perp. to $y = \frac{1}{2}x + 4$

Answers to Graphing Parallel and Perpendicular Lines

1) $y = \frac{4}{5}x - 2$

2) $y = -\frac{7}{3}x - 4$

3) $y = \frac{5}{2}x + 3$

4) $y = \frac{3}{4}x + 5$

5) $y = -\frac{3}{7}x - \frac{20}{7}$

6) $y = -x - 1$

7) $x = -4$

8) $y = -\frac{4}{5}x + 4$

9) $y = -\frac{1}{4}x + \frac{1}{4}$

10) $y = -4x + 8$

11) $y = -2x + 2$

12) $y = -\frac{7}{5}x + 5$

13) $y = -2$

14) $y = x + 1$

15) $y = \frac{7}{3}x - 5$

16) $y = -\frac{7}{2}x - 2$

17) $x = 2$

18) $x = -4$

19) $y = -\frac{1}{2}x - 3$

20) $y = -2x$