Math 4SN   Name_____

Parallel and Perpendicular Lines

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

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

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

3) through: $(-3, 5)$, parallel to $y = 5$

4) through: $(5, -5)$, parallel to $y = -\dfrac{8}{5}x - 2$

5) through: $(3, 4)$, parallel to $x = 0$

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

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

8) through: $(-3, -4)$, parallel to $y = \dfrac{8}{7}x + 5$

9) through: $(-5, 4)$, parallel to $y = -\dfrac{9}{2}x - 1$

10) through: $(-3, 5)$, parallel to $y = -\dfrac{8}{3}x + 3$

11) through: $(4, 0)$, perp. to $x = 0$

12) through: $(1, 2)$, perp. to $y = -\dfrac{1}{2}x - 4$

13) through: $(-4, -1)$, perp. to $y = 4x - 4$

14) through: $(-4, -1)$, perp. to $y = 7x + 2$

15) through: $(5, 5)$, perp. to $y = -\dfrac{5}{4}x - 5$

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

17) through: $(-1, -2)$, perp. to $y = -\dfrac{1}{4}x - 4$

18) through: $(-1, -5)$, perp. to $y = -\dfrac{1}{9}x + 1$

19) through: $(-5, -2)$, perp. to $y = 0$

20) through: $(3, 1)$, perp. to $y = 3x - 5$

Answers to Parallel and Perpendicular Lines (ID: 1)

1) $y = \dfrac{3}{2}x + 1$

2) $y = \dfrac{1}{2}x + \dfrac{11}{2}$

3) $y = 5$

4) $y = -\dfrac{8}{5}x + 3$

5) $x = 3$

6) $y = \dfrac{1}{4}x + \dfrac{5}{2}$

7) $y = 5x + 17$

8) $y = \dfrac{8}{7}x - \dfrac{4}{7}$

9) $y = -\dfrac{9}{2}x - \dfrac{37}{2}$

10) $y = -\dfrac{8}{3}x - 3$

11) $y = 0$

12) $y = 2x$

13) $y = -\dfrac{1}{4}x - 2$

14) $y = -\dfrac{1}{7}x - \dfrac{11}{7}$

15) $y = \dfrac{4}{5}x + 1$

16) $y = \dfrac{3}{2}x + 1$

17) $y = 4x + 2$

18) $y = 9x + 4$

19) $x = -5$

20) $y = -\dfrac{1}{3}x + 2$