College Math Name_____

Parallel & Perpendicular Lines - PRACTICE

Date_____

Write the SLOPE-INTERCEPT form of the equation of the line described.

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

2) through: $(-5, 2)$, parallel to $y = -4x + 5$

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

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

Write the STANDARD form of the equation of the line described.

5) through: $(5, -4)$, parallel to $x + 2y = 7$

6) through: $(1, -5)$, parallel to $2x + y = 12$

7) through: $(1, -5)$, parallel to $3x - y = 2$

8) through: $(-3, 0)$, parallel to $5x - 3y = 8$

Write the POINT-SLOPE form of the equation of the line described.

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

10) through: $(-3, 0)$, parallel to $y - 1 = -(x + 4)$

11) through: $(5, 1)$, parallel to $y - 7 = \frac{3}{5}(x - 10)$

12) through: $(-2, 4)$, parallel to $y + 3 = -\frac{1}{2}(x - 5)$

Write the SLOPE-INTERCEPT form of the equation of the line described.

13) through: $(1, -4)$, perp. to $y = x - 5$

14) through: $(-4, -3)$, perp. to $y = 4x - 5$

15) through: $(1, -4)$, perp. to $y = -x + 3$

16) through: $(-2, -4)$, perp. to $y = -\frac{2}{5}x + 3$

Write the STANDARD form of the equation of the line described.

17) through: $(4, -1)$, perp. to $4x - 5y = 8$

18) through: $(4, -1)$, perp. to $4x + y = 9$

19) through: $(-2, 5)$, perp. to $2x - 7y = 5$

20) through: $(2, -1)$, perp. to $3x + y = 11$

Write the POINT-SLOPE form of the equation of the line described.

21) through: $(2, 4)$, perp. to $y - 13 = -\frac{2}{7}(x + 6)$

22) through: $(5, -4)$, perp. to $y - 7 = \frac{5}{3}(x - 10)$

23) through: $(-3, -2)$, perp. to $y + 8 = -\frac{3}{4}(x - 4)$

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