SRHS Math 1 - #SFRev2 Name_____

Solve each equation.

1) $6\left|-5r\right| - 7 = 23$

2) $8\left|n - 4\right| - 4 = 20$

Solve each inequality and graph its solution.

3) $\frac{x}{9} + 5 < 6$

4) $4x - 1 \le -41$

5) $3(-3 + v) > -15$

6) $-2x - 4 < -2$

Solve the compound inequality.

7) $6k - 4 < -40$ or $3 - 4k \le 15$

8) $-40 \le 6x - 4 < 32$

Solve the inequality.

9) $\left|x + 6\right| - 6 \ge -5$

10) $2 + \left|x - 5\right| \le 9$

Find the slope of the line through the pair of points.

11) $(6, -10), (-17, 17)$

12) $(10, -20), (13, 11)$

Write the point-slope form of the equation of the line through the given point with the given slope.

13) through: $(3, -5)$, slope $= -\frac{2}{3}$

14) through: $(-2, -4)$, slope $= \frac{7}{5}$

Write the point-slope form of the equation of each line described.

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

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

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

18) through: $(1, -2)$, perp. to $y = -\frac{1}{3}x + 2$

Solve each system of linear equations.

19) $y = -5x + 12$
$-4x + 5y = 2$

20) $-6x + 4y = 12$
$y = x + 4$