

Name \_\_\_\_\_ Block \_\_\_\_\_

Solve for x

1)  $2x + 7 = 15$

2)  $3x - 1 = 8$

3)  $\frac{x}{2} + 13 = 20$

4)  $\frac{x}{3} - 5 = -1$

5)  $-7x + 4x = 9$

6)  $x + 5x - 5 = 1$

7)  $3(x - 2) = 18$

8)  $12(2 - x) = 6$

9)  $\frac{3}{8}x + \frac{3}{4} = \frac{1}{2}$

10)  $\frac{x}{5} - \frac{3}{10} = \frac{3}{2}$

11)  $\frac{2}{3}x + \frac{5}{6} = \frac{7}{12}$

12)  $24 - 6x = 2(4x - 2)$

13)  $4x + 27 = 3x$

14)  $12x + 21 = 9x$

15)  $6x - 11 = -2x + 5$

16)  $12x - 7 = -3x + 8$

Rewrite in slope-intercept form ( $y=mx+b$ ).

1)  $x + 3y = 15$

2)  $-5x + y = 19$

3)  $2x + y - 3 = 0$

4)  $2x + y + 10 = 0$

5)  $x - 7y = 3$

6)  $3x + 6y = -18$

Rewrite in Standard Form ( $Ax + By = C$ )

7)  $y = 3x - 8$

8)  $y = -5x + 2$

9)  $2x - 3y - 14 = 0$

10)  $y = -\frac{1}{3}x - 4$

11)  $y = 9x + \frac{1}{2}$

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

Solve the inequality. Graph the solutions.

1)  $3(3x - 4) \geq 15$

2)  $-5x - 10 \geq -10$

3)  $-15 > -3x - 45$

4)  $-9 - x > 3x + 11$

5)  $5x - 20 > 2x + 1$

6)  $5x - 3 > 2(3 + x)$

7)  $0 \leq x + 9 < 17$

8)  $-13 \leq 5 - 2x < 9$

9)  $2x + 1 > 13$  or  $-18 > 7x + 3$

10)  $6 + 2x > 20$  or  $8 + x \leq 0$