

# Solve + graph Multi-Step Inequalities

Solve each inequality and graph the solutions.

**1**  $3x - 30 > -6$



**2**  $9x + 13 \leq -14$



**3**  $19 - 2x \leq 43$



**4**  $2x + 18 \geq 7x - 17$



**5**  $3x - 48 < 32 - 5x$



**6**  $4x + 13 \leq 5x + 38$



**7**  $10x - 16 < 8(x - 6)$



**8**  $3(x + 5) < 7x - 5$



**9**  $5(x + 6) \leq 42 - x$



**10**  $2(4x + 5) < 4x + 38$



**11**  $-9(x - 10) > -5(x - 30)$



**12**  $11(x + 3) \geq 6(x + 6)$



**13**  $1.6x + 8.4 > 1.2 - 0.2x$



**14**  $1.9x - 2.3 \leq 0.5x + 6.1$



**15**  $\frac{2}{3}x + 1 > \frac{5}{9}x$



**16**  $\frac{5}{6}x - 6 \geq \frac{1}{2}x$



# Solve + Graph Multi-Step Inequalities

Solve each inequality and graph the solutions.

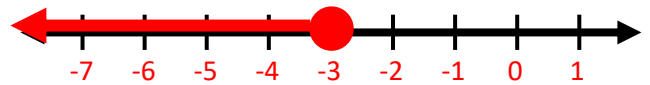
**1**  $3x - 30 > -6$

$x > 8$



**2**  $9x + 13 \leq -14$

$x \leq -3$



**3**  $19 - 2x \leq 43$

$x \geq -12$



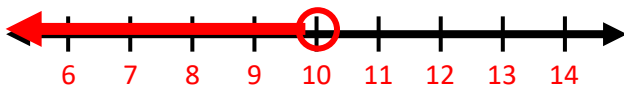
**4**  $2x + 18 \geq 7x - 17$

$x \leq 7$



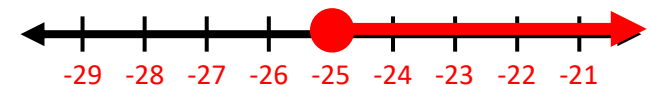
**5**  $3x - 48 < 32 - 5x$

$x < 10$



**6**  $4x + 13 \leq 5x + 38$

$x \geq -25$



**7**  $10x - 16 < 8(x - 6)$

$x < -16$



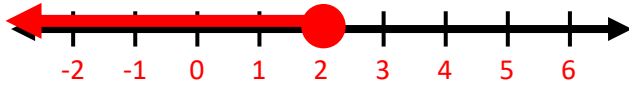
**8**  $3(x + 5) < 7x - 5$

$x > 5$



**9**  $5(x + 6) \leq 42 - x$

$x \leq 2$



**10**  $2(4x + 5) < 4x + 38$

$x < 7$



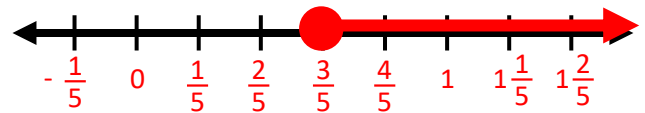
**11**  $-9(x - 10) > -5(x - 30)$

$x < -15$



**12**  $11(x + 3) \geq 6(x + 6)$

$x \geq \frac{3}{5}$



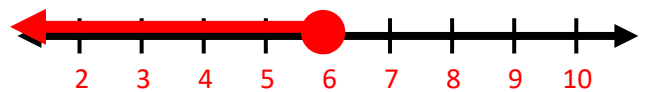
**13**  $1.6x + 8.4 > 1.2 - 0.2x$

$x > -4$



**14**  $1.9x - 2.3 \leq 0.5x + 6.1$

$x \leq 6$



**15**  $\frac{2}{3}x + 1 > \frac{5}{9}x$

$x > -9$



**16**  $\frac{5}{6}x - 6 \geq \frac{1}{2}x$

$x \geq 18$

