

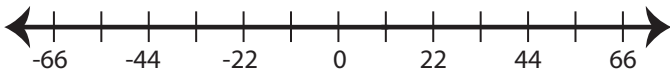
Name : \_\_\_\_\_

Score : \_\_\_\_\_

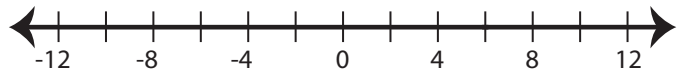
## Solving & Graphing Inequalities

Solve each problem and graph the solutions.

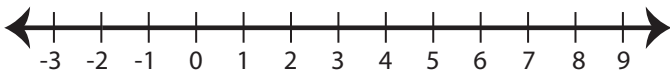
1)  $2x - 9 \geq 13$  or  $-4 > \frac{x-1}{3}$



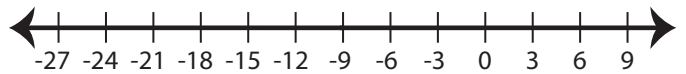
2)  $5x + 7 > -3$  and  $4x - 16 > 8$



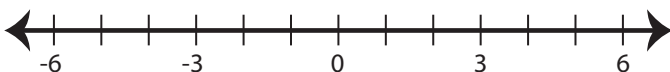
3)  $4 < 5 + \frac{x}{2} \leq 9$



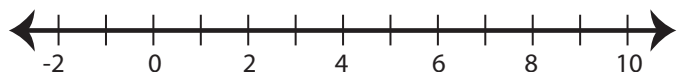
4)  $\frac{x-6}{12} \leq -2$  or  $-18 \leq 3x + 9$



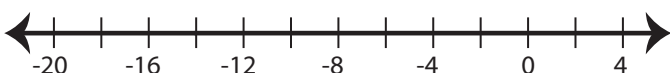
5)  $-23 \geq 5x - 8$  or  $6x + 4 \leq -8$



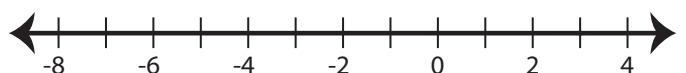
6)  $1 < \frac{x+7}{8}$  and  $9x - 11 \geq 25$



7)  $\frac{x-2}{16} < -1$  and  $7x + 5 < -23$



8)  $-1 \leq 3x + 2 < 11$

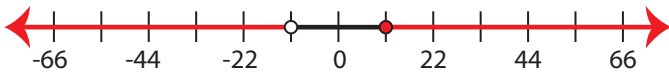


**Answer key**

Solve each problem and graph the solutions.

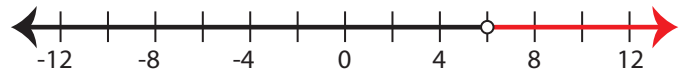
1)  $2x - 9 \geq 13$  or  $-4 > \frac{x-1}{3}$

$x < -11$  or  $x \geq 11$



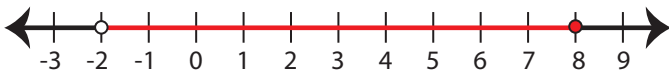
2)  $5x + 7 > -3$  and  $4x - 16 > 8$

$x > 6$



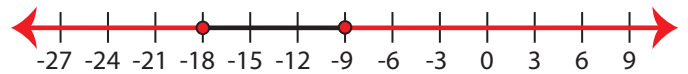
3)  $4 < 5 + \frac{x}{2} \leq 9$

$-2 < x \leq 8$



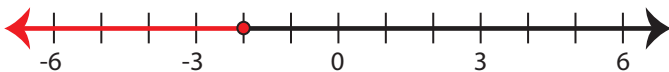
4)  $\frac{x-6}{12} \leq -2$  or  $-18 \leq 3x + 9$

$x \leq -18$  or  $x \geq -9$



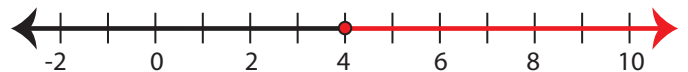
5)  $-23 \geq 5x - 8$  or  $6x + 4 \leq -8$

$x \leq -2$



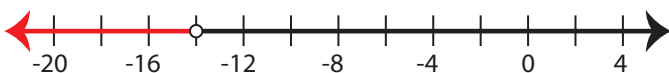
6)  $1 < \frac{x+7}{8}$  and  $9x - 11 \geq 25$

$x \geq 4$



7)  $\frac{x-2}{16} < -1$  and  $7x + 5 < -23$

$x < -14$



8)  $-1 \leq 3x + 2 < 11$

$-1 \leq x < 3$

