

## Assignment 18

Solve the equations on this page for the given variable.

1.  $\frac{2}{3}x = 12$

2.  $\frac{4x}{5} = 20$

3.  $\frac{5}{2}x = -30$

4.  $\frac{-2x}{7} = 10$

5.  $-\frac{5}{4}x = -15$

6.  $\frac{3}{2}x = 9$

1.  $\frac{1}{3}x + 6 = 2$

2.  $5 + \frac{4}{3}x - 2 = 19$

3.  $5 - \frac{2}{5}x + 4 = 15$

4.  $31 = 10 - \frac{3}{2}x$

5.  $-15 = 6 + \frac{4}{5}x - 1$

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

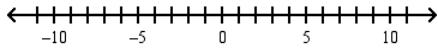
1.  $3x + 2(x + 1) - 6 = 39 - 4(x - 5)$

2.  $3x + 4(x + 1) = 5(x + 2) + 30$

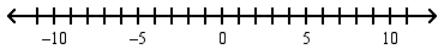
3.  $5x - 7 - 2x = x + 25$

4.  $5x + 8 - 6x = 10 + 3x + 6$

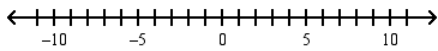
1. Graph  $x > -3$  and  $x > 5$



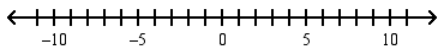
2. Graph  $x < -3$  or  $x > 2$



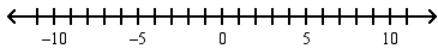
3. Graph  $x \geq -5$  and  $x \leq 7$



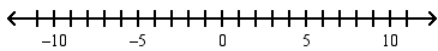
4. Graph  $x < -1$  or  $x \leq 3$



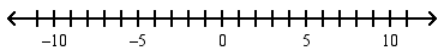
5. Graph  $x < -5$  or  $x < 6$



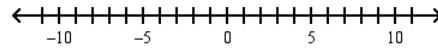
6. Graph  $x \geq -2$  or  $x \leq 5$



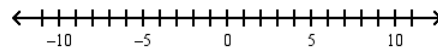
7. Graph  $-4 \leq x \leq 8$



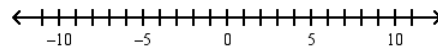
1. Solve and graph:  
 $3x + 5 > -7$  or  $x + 3 > 7$



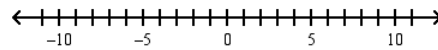
2. Solve and graph:  
 $-3 - 4x > 5$  and  $3x - 4 < 5$



3. Solve and graph:  
 $1 - x > -3$  and  $2x + 7 > 3$



4. Solve and graph:  $-5x \geq 15$  or  $-18 > -3x$



*Solve each equation, remember there may be no solution or it could be all real numbers.*

1.  $3x - 5 = 3(x - 2)$

2.  $x + 2(4x - 1) = 9x - 2$

3.  $6(x - 2) = 2(x + 4)$

4.  $x + 10 - 3x = -2(x - 5)$

5.  $5(x - 3) + 6 = 2x + 3(x - 4)$