

By the end of this lesson you will be able to

- 1) _____
- 2) _____

Example 1- Determine if the following value is a solution to the inequality.

- 1) Is _____ a solution to the inequality $5 + x \leq 12$? Explain your steps and thought process.

- 2) Is _____ a solution to the inequality $x - 12 > -8$? Explain your steps and thought process.

- 3) Is _____ a solution to the inequality $4x \leq 20$? Explain your steps and thought process.

- 4) Is _____ a solution to the inequality $\frac{x}{5} \leq -3$? Explain your steps and thought process.

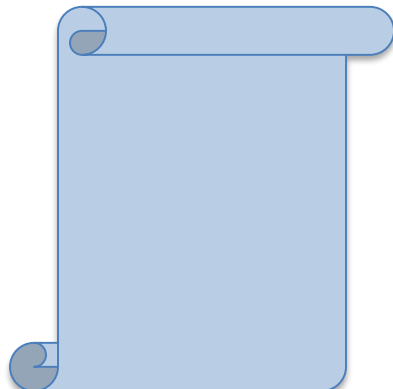
How is solving an inequality different than solving an equation?

$$12 + x = 9$$

$$x = \underline{\hspace{2cm}}$$

The solution for x is _____.

Subtract 12 from both sides.



$$12 + x > 9$$

$$x > \underline{\hspace{2cm}}$$

The solution for x is _____

Example 2 - Solve for the variable x .

$$x - 14 > 6$$

1) $x + 20 < 6$

2) $2x \geq 35$

3) $\frac{x}{7} \leq -3$

My Steps...

Your Turn to Practice

Determine whether the value is a solution to the inequality.

1) Is _____ a solution to the inequality _____?

2) Is _____ a solution to the inequality _____?

3) Is _____ a solution to the inequality _____?

Solve for the variable x in each inequality.

4)

5)

6)

7)