



Questions?  
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Ask Question 

**Question**

Solve:  $-3x + x < 10 - x$

**Answer**

$$-3x + x < 10 - x$$

$$-2x < 10 - x$$

$$-2x + x < 10 - x + x$$

$$-x < 10$$

$$-x(-1) > 10(-1)$$

$$x > -10$$

## 5. Inequalities

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Question

$$\text{Solve: } x \leq 3(10 + x - 10)$$

Answer

$$x \leq 3(\cancel{10} + x - \cancel{10})$$

$$x \leq 3(x)$$

$$x \leq 3x$$

$$\cancel{x} - \cancel{x} \leq (3x - x)$$

$$0 \leq 2x$$

$$\frac{0}{2} \leq \frac{2x}{2}$$

$$x \geq 0$$

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Solve:  $-2x + x \leq 1 - 3x$

Question

Answer

$$-2x + x \leq 1 - 3x$$

$$-x \leq 1 - 3x$$

$$-x + 3x \leq 1 - 3x + 3x$$

$$2x \leq 1$$

$$\frac{2x}{2} \leq \frac{1}{2}$$

$$x \leq \frac{1}{2}$$

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Questions?  
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Solve:  $-x > 7 + x + 5x$

Question

Answer

$$-x > 7 + (x + 5x)$$

$$-x > 7 + 6x$$

$$(-x - 6x) > 7 + 6x - 6x$$

$$-7x > 7$$

$$\frac{-7x}{-7} < \frac{7}{-7}$$

$$x < -1$$

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Questions?  
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Solve:  $x > 8 + 4x$

Question

Answer

$$x > 8 + 4x$$

$$x - 4x > 8 + 4x - 4x$$

$$-3x > 8$$

$$\frac{-3x}{-3} < \frac{8}{-3}$$

$$x < \frac{-8}{3}$$

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Questions?  
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## Problem 6 of 6

Solve:  $-2x + 5x \geq 12$

Question

Answer

$$-2x + 5x \geq 12$$

$$3x \geq 12$$

$$\frac{3x}{3} \geq \frac{12}{3}$$

$$x \geq 4$$

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