Warm Up

Solve $6(x+3) = -2(x-1)$

Nov 4-9:12 AM

Warm Up

Solve $x^2(x+3) = -2x$

Nov 4-9:12 AM

Warm Up

Solve $$2x^3 - 13x = x^2 + 6$$

Sec 4.2 Solving Linear Inequalities

When we solve a linear equality, we isolate the variable on one side of the equal sign and the "numbers" on the other.

$$2x + 8 = 12$$

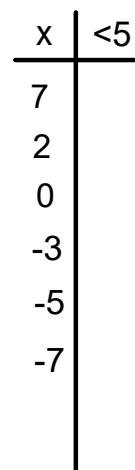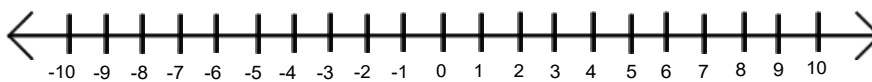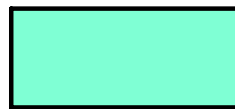A linear inequality is the same idea with an inequality sign.

$$2x + 8 < 12$$

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The only issue is dealing with negative signs with the inequality sign. $x < 5$

$$-x < 5$$　　or

x	<5
7	
2	
0	
-3	
-5	
-7	

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Rule:
If you **divide** or **multiply** by a negative #
through an inequality the inequality sign
switches.

$$12 - 3x < 15$$

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Now put together your algebra skills with
inequalities; just remember to switch the sign
with a mult/div by negative.

(a)   -3(a-5)<21

(b) $30 \leq 3(2x+4) - 2(x+1) \leq 46$

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Homework

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