

## Warm-UP

Do these in 15 min

Solve for x  
Examples:

1)  $7 - 6x = 85$

Fraction multiply by the  
common denominator

2)  $\frac{-6x + 7}{4} = \frac{4}{5}$

"x" on opposite sides

3)  $10x + 4 = -2x - 32$

Brackets

4)  $6(x-3) = 30$

5) Bracket and Fractions

$\frac{2(x+3)}{3} = 5(x-1)$

6) Negative inequalities

$-3x < 12$

Examples:

Solve for x

$$1) 7 - 6x = 85$$

$$-6x = 78$$

$$\frac{-6x}{-6} = \frac{78}{-6}$$

$$x = -13$$

Fraction multiply by the common denominator

$$2) \frac{-6x + 7}{4} = \frac{4}{5}$$

$$\frac{-120x + 140}{4} = \frac{80}{5}$$

$$-30x + 140 = 16$$

$$-30x + 140 = 16 - 140$$

$$-30x = -124$$

$$\frac{-30x}{-30} = \frac{-124}{-30}$$

$$x = \frac{62}{15}$$

"x" on opposite sides

$$3) 10x + 4 = -2x - 32$$

$$10x + 4 = -2x - 32$$

$$12x + 4 = -32$$

$$12x = -36$$

$$\frac{12x}{12} = \frac{-36}{12}$$

$$x = -3$$

Brackets

$$4) 6(x-3) = 30$$

$$6x - 18 = 30$$

$$6x - 18 = 30 + 18$$

$$6x = 48$$

$$\frac{6x}{6} = \frac{48}{6}$$

$$x = 8$$

5) Bracket and Fractions

$$\frac{2(x+3)}{3} = 5(x-1)$$

$$\frac{2x}{3} + \frac{6}{3} = 5x - 5$$

$$\frac{2x}{3} + \frac{6}{3} = 5x - 5$$

$$\frac{6x}{3} + \frac{18}{3} = 15x - 15$$

$$2x + 6 = 15x - 15$$

$$2x + 6 = 15x - 15$$

$$-13x + 6 = -15$$

$$-13x = -21$$

$$\frac{-13x}{-13} = \frac{-21}{-13}$$

$$x = \frac{21}{13}$$

6) Negative inequalities

NOTICE  
INEQUALITY  
CHANGED

$$-3x < 12$$

$$\frac{-3x}{-3} > \frac{12}{-3}$$

$$x > -4$$



# Class/Homework



\* Test on Friday March 1

Any questions from your homework?

-open HW file to see answers



## Test Review Questions

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#4	#15	#3
#7	#16	#4
#9		#5
		#6

As well you have a Worksheet

\*\*\*Test on Friday March 1\*\*\*

## Worksheet

1)  $x + 14 > 10$

2)  $15 + n \leq -2$

3)  $\frac{v}{6} < 16$

4)  $-19 < k - 18$

5)  $a - 6 \leq 6$

6)  $9x \leq 153$

$$13) -14 - 3n - 7n < 7 - 7n$$

$$14) 1 - k \geq 5k + 3 + 3 + 13$$

$$15) 5 + 12p < 10 + 7p + 10$$

$$16) -2 + 6x \geq x - 2$$

$$n \geq 0$$

$$17) -6 - 5n + n \leq -3n - 2n$$

$$18) 12 - 6r < 5 - 5r$$

$$19) -12 + 8m - 4m > 7m + 6 + 3m$$

$$20) -15 - 7x - 2x < -5x - 7x$$

$$21) n + 5 > 5n - 8n - 3$$

$$22) 2b - 8b > -16 + 8 - 4b - 2$$

$$23) \frac{3(x+15)}{5} \leq \frac{1}{10}(20x-30)$$

$$24) \frac{m}{4} - 2 \geq 6 - \frac{m}{3}$$



$$7) -7 < \frac{p}{2} - \frac{2}{3}$$

$$8) 11n < 121$$

$$9) -18 \leq \frac{m}{2} + 3$$

$$10) \frac{p}{19} < \frac{-5}{19}$$

$$11) -3x + \frac{2}{5} > \frac{-1x}{2} - 6$$

$$12) -7x + 9 \leq -7x + 8$$