Examples:

Solve for x

1) $7 - 6x = 85$

Fraction multiply by the common denominator

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

"x" on opposite sides

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

Brackets

4) $6(x-3) \geq 30$

5) Bracket and Fractions

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

6) Negative inequalties

$-3x < 12$

Examples:

Solve for x

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

$-6x = 78$

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

$x = -13$

Fraction multiply by the common denominator

2) $\frac{-6x}{4} + 7 \leq \frac{4}{5}$ ·20 ·20

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

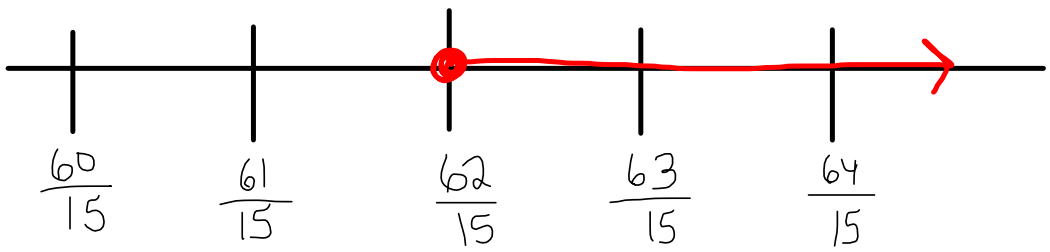
$-30x + 140 \leq 16$

$-30x + 140 \leq 16$ -140 -140

$-30x \leq -124$

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

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



"x" on opposite sides

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

$+2x \quad +2x$

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

$-4 \quad -4$

$12x + 4 = -32$

$12x = -36$

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

$x = -3$

- Brackets

4) $6(x-3) \geq 30$

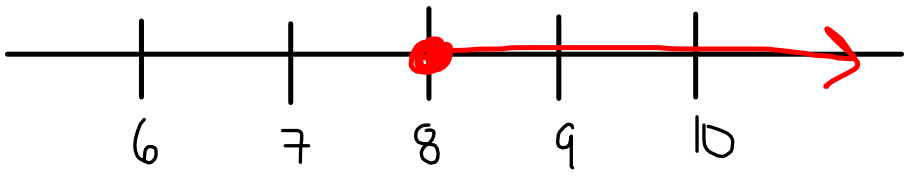
$6x - 18 = 30$

$6x - 18 \geq 30$ (+18) (+18)

$6x \geq 48$

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

$x \geq 8$



5) Bracket and Fractions

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

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

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

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

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

$$2x \overset{-15x}{+} 6 = 15x \overset{-15x}{-} 15$$

$$-13x + 6 \overset{-6}{=} -15 \overset{-6}{}$$

$$-13x = -21$$

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

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

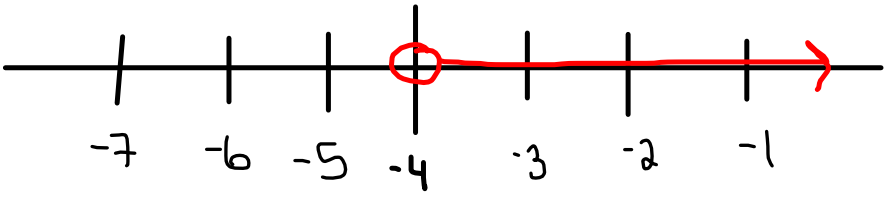
6) Negative inequalties

NOTICE
INQUALITY
CHANGED

$$-3x < 12$$

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

$$x > -4$$



Test Review Questions

Page 308 - 309		Page 310(Practice test)
#3	#10	#2
#4	#15	#3
#7	#16	#4
#8		#5
#11		#6

Test on Wednesday Feb 26

As well you have a Worksheet

Attachments

Math 9_6.4_WORKSHEET.docx