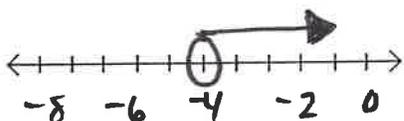


6.1: I can solve and graph one-step inequalities with addition and subtraction.

1. $x + 8 > 4$

$x + 8 - 8 > 4 - 8$

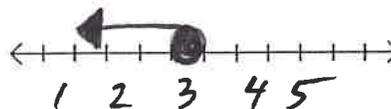
$x > -4$



2. $p - 6 \leq -3$

$p - 6 + 6 \leq -3 + 6$

$p \leq 3$



2 pts
pa

3. $k - 14 \leq -10$

$k - 14 + 14 \leq -10 + 14$

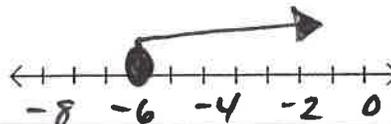
$k \leq 4$



4. $s + 1 \geq -5$

$s + 1 - 1 \geq -5 - 1$

$s \geq -6$



Score: 8 pts. %

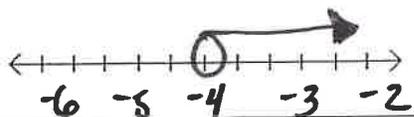
6.2: I can solve and graph one-step inequalities with multiplication and division.

1. $-6x < 24$

$\frac{-6x}{-6} < \frac{24}{-6}$

$x > -4$

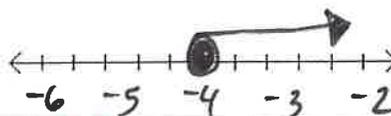
* switch the sign!



2. $4x \geq -16$

$\frac{4x}{4} \geq \frac{-16}{4}$

$x \geq -4$



2 pts
pa

3. $\frac{x}{2} \leq 3$

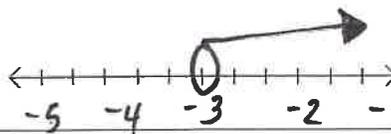
$x \leq 6$



4. $1 > -\frac{x}{3}$

$-3 < x$

* switch the sign!



Score: 8 pts. %

6.3: I can solve multiple-step inequalities.

1. $5 + x - 9 \geq 4$

$$x - 4 + 4 \geq 4 + 4$$

$$x \geq 8$$

2. $\frac{-3x+6}{-5} \leq -3$ (-5)

$$-3x + 6 \geq 15 - 6$$

$$-3x \geq 9$$

$$x \leq -3$$

*switch the sign twice!

3 pts ea

3. $-8(x+3) \leq 16$

$$-8x - 24 + 24 \leq 16 + 24$$

$$-8x \leq 40$$

$$x \geq -5$$

*switch the sign!

4. $3x - 7x + 2 < 10 - 12$

$$-4x + 2 - 2 < -2 - 2$$

$$-4x < -4$$

$$x > 1$$

*switch the sign!

5. $\frac{2x-1}{3} \geq 1$ (3)

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

$$2x \geq 4$$

$$x \geq 2$$

6. $-3(x-4) + 2(x+2) > 15$

$$-3x + 12 + 2x + 4 > 15$$

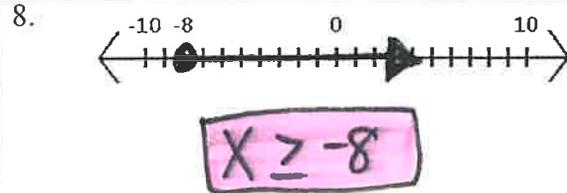
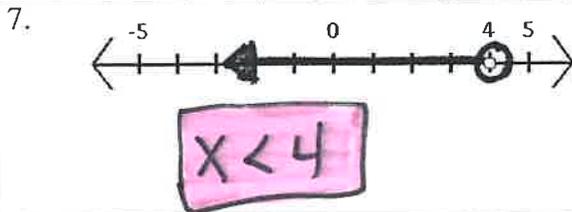
$$-x + 16 - 16 > 15 - 16$$

$$-x > -1$$

$$x < 1$$

*switch the sign!

Write an inequality representing the graph provided.



1 pt ea

Score: 20 pts %

6.4: I can solve inequalities that have variables on both sides.

1. $2(x-3) + 4 \geq x + 12$

$$2x - 6 + 4 \geq x + 12$$

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

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

$$x \geq 14$$

2. $3(4x-1) \leq 12x + 25$

$$12x - 3 - 12x \leq 12x + 25 - 12x$$

$$0x - 3 + 3 \leq 25 + 3$$

$$0x \leq 28$$

$$\text{ARN}$$

3 pts ea

3. $-9(x+2) < -6x - 3(x+8)$

$$-9x - 18 < -6x - 3x - 24$$

$$-9x - 18 + 9x < -9x - 24 + 9x$$

$$0x - 18 + 18 < -24 + 18$$

$$0x < -6$$

NS

4. $3(12+2x) + 10 < 10x + 6$

$$36 + 6x + 10 < 10x + 6$$

$$6x + 46 - 10x < 10x + 6 - 10x$$

$$-4x + 46 - 46 < 6 - 46$$

$$\frac{-4x}{-4} < \frac{-40}{-4}$$

* Switch the sign!

$x > 10$

Score: 12 pts %

6.5: I can solve inequalities with fractions.

1. $\frac{3}{5}x - \frac{11}{30} \geq -\frac{5}{6}$ LCM=30

($\frac{30}{1}$) $\frac{3}{5}x - \frac{11}{30}(\frac{30}{1}) \geq -\frac{5}{6}(\frac{30}{1})$

$$18x - 11 + 11 \geq -25 + 11$$

$$\frac{18x}{18} \geq \frac{-14}{18}$$

$x \geq -\frac{7}{9}$

2. $-3\frac{2}{15} < -1 + \frac{4}{3}n$ LCM=15

$$-\frac{47}{15}(\frac{15}{1}) < -1(15) + \frac{4}{3}n(\frac{15}{1})$$

$$-47 + 15 < -15 + 20n + 15$$

$$\frac{-32}{20} < \frac{20n}{20}$$

$-\frac{13}{5} < n$

3 pts ea

3. $\frac{11}{4}x + 1 + \frac{5}{8}x < -\frac{13}{16}$ LCM=16

($\frac{16}{1}$) $\frac{11}{4}x + 1(\frac{16}{1}) + \frac{5}{8}x(\frac{16}{1}) < -\frac{13}{16}(\frac{16}{1})$

$$44x + 16 + 10x < -13$$

$$54x + 16 - 16 < -13 - 16$$

$$\frac{54x}{54} < \frac{-29}{54}$$

$x < -\frac{29}{54}$

4. $-7n - \frac{15}{7} + 2\frac{6}{7} \geq -\frac{137}{14}$ LCM=14

$$-7n(14) - \frac{15}{7}(\frac{14}{1}) + \frac{20}{7}(\frac{14}{1}) \geq -\frac{137}{14}(\frac{14}{1})$$

$$-98n - 30 + 40 \geq -137$$

$$-98n + 10 - 10 \geq -137 - 10$$

$$\frac{-98n}{-98} \geq \frac{-147}{-98}$$

$n \leq 1.5$

* Switch the sign!

Score: 12 pts %

