

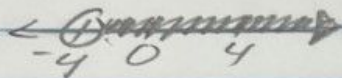
HW: Nov. 29 Answer Key

HW: Inequalities

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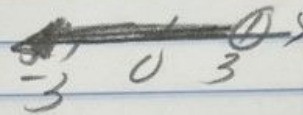
$$1) \quad 2c + 7 < 15 + 4c$$

$$\begin{array}{r} -4c \\ \hline -2c + 7 < 15 \\ -7 \quad -7 \\ \hline -2c < 8 \\ -2 \quad -2 \\ \hline c > -4 \end{array}$$



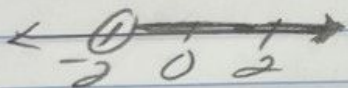
$$4) \quad 4.5 - 0.5x > 1x$$

$$\begin{array}{r} +0.5x + 0.5x \\ \hline 4.5 > 1.5x \\ 1.5 \quad 1.5 \\ \hline 3 > x \\ \text{or} \\ x < 3 \end{array}$$



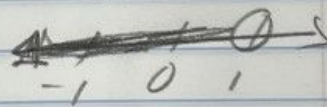
$$2) \quad -3(3x + 1) < 15$$

$$\begin{array}{r} -9x - 3 < 15 \\ +3 \quad +3 \\ \hline -9x < 18 \\ -9 \quad -9 \\ \hline x > -2 \end{array}$$



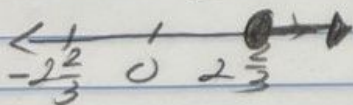
$$5) \quad 15x - 4 < 9 + 2x$$

$$\begin{array}{r} -2x \\ \hline 13x - 4 < 9 \\ +4 \quad +4 \\ \hline 13x < 13 \\ 13 \quad 13 \\ \hline x < 1 \end{array}$$



$$*3) \quad 6 \left[\frac{1x + 5}{3} \geq \frac{3}{1} \right]$$

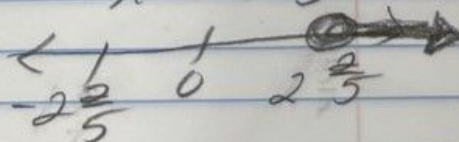
$$\begin{array}{r} 3x + 10 \geq 18 \\ -10 \quad -10 \\ \hline 3x \geq 8 \\ \frac{3}{3} \quad -\frac{3}{3} \\ \hline x \geq 2\frac{2}{3} \end{array}$$



$$x \geq 2.\bar{6}$$

$$*6) \quad 3x \geq 2 - 2(x - 5)$$

$$\begin{array}{r} 3x \geq 2 - 2x + 10 \\ 3x \geq 12 - 2x \\ +2x \quad +2x \\ \hline 5x \geq 12 \\ \frac{5}{5} \quad \frac{5}{5} \\ \hline x \geq 2\frac{2}{5} \end{array}$$



$$x \geq 2.4$$

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$$7.) \frac{-5c > 35}{-5 \quad -5}$$

$$c < -7$$

$$(C) \leftarrow \textcircled{-7} \quad | \quad | \quad | \rightarrow$$

$$-7 \quad 0 \quad 7$$

$$8.) 2c - 6 \geq 10$$

$$\frac{+6 \quad +6}{2c - 6 \geq 10}$$

$$\frac{2c \geq 16}{2 \quad 2}$$

$$c \geq 8$$

$$\leftarrow | \quad | \quad \textcircled{8} \rightarrow$$

$$-8 \quad 0 \quad 8$$

(B)

9.) Let

$x = \#$ of rides

$$\frac{3.75 + 1.25x \geq 44}{-3.75 \quad -3.75}$$

$$\frac{1.25x \geq 40.25}{1.25 \quad 1.25}$$

$$x \geq 32.2$$

$$\leftarrow | \quad | \quad \textcircled{32.2} \rightarrow$$

$$-32.2 \quad 0 \quad 32.2$$

32 rides

10.) Let

$x = \#$ of players

$$\frac{450 + 28.75x \leq 979}{-450 \quad -450}$$

$$\frac{28.75x \leq 529}{28.75 \quad 28.75}$$

$$x \leq 18.4$$

$$\leftarrow \textcircled{18.4} \rightarrow$$

$$-18.4 \quad 0 \quad 18.4$$

18 members