

7.2 Practice Problem answers

Directions: Solve the inequality. Graph the solution.

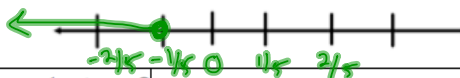
1) $-8 \leq 8 + y$

$$\begin{array}{r} -8 \quad -8 \\ \hline -16 \leq y \end{array}$$



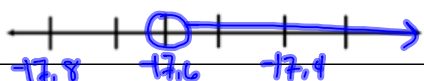
2) $n + 17 \leq 16\frac{4}{5}$

$$\begin{array}{r} -17 \quad -17 \\ \hline n \leq -\frac{1}{5} \end{array}$$



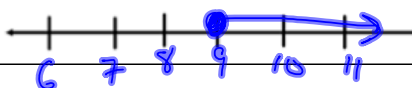
3) $w + 14.9 > -2.7$

$$\begin{array}{r} -14.9 \quad -14.9 \\ \hline w > -17.6 \end{array}$$



4) $1 \leq s - 8$

$$\begin{array}{r} +8 \quad +8 \\ \hline 9 \leq s \end{array}$$



5) $q - 1\frac{1}{3} > -2\frac{1}{2}$

$$\begin{array}{r} +1\frac{1}{3} \quad +1\frac{1}{3} \\ \hline q > -1\frac{1}{6} \end{array}$$



6) $d - 1.92 > -8.76$

$$\begin{array}{r} +1.92 \quad +1.92 \\ \hline d > -6.84 \end{array}$$

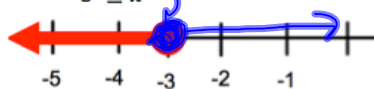


Directions: Describe and correct the error in solving the inequality or in graphing the solution.

7) $-17 \leq x - 14$

$$-17 + 14 \leq x - 14 + 14$$

$$-3 \leq x$$



The graph is wrong. IT WANTS

All #'s BIGGER THAN -3.

Directions: Write the verbal sentence as an inequality. Then solve the inequality and graph your solution.

8) The difference of n and 15 is less than or equal to 37.

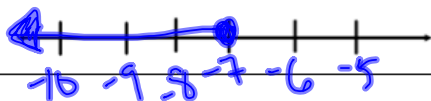
$$\boxed{n - 15 \leq 37}$$

$$\boxed{n \leq 52}$$

Directions: Solve the inequality. Graph your solution.

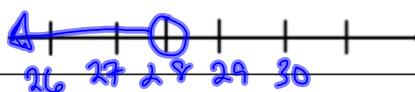
9) $2p \geq 14$

$$\begin{array}{r} \cdot 2 \quad \cdot 2 \\ \hline p \geq 7 \end{array}$$



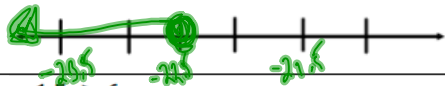
10) $\frac{q}{4} < 7(4)$

$$q < 28$$



$$11) \frac{-90}{4} \geq \frac{4t}{4}$$

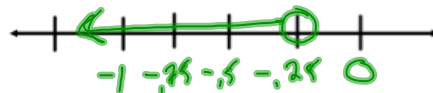
$$-22.5 \geq t$$



$$12) -8.4f > 2.1$$

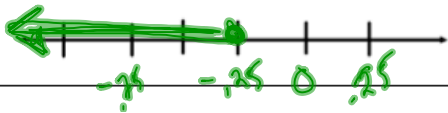
$$\frac{-8.4f}{-8.4} > \frac{2.1}{-8.4}$$

$$f < -0.25$$



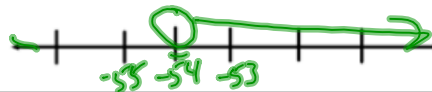
$$13) \frac{-1.5}{6} \geq \frac{6z}{6}$$

$$-0.25 \geq z$$



$$14) \left(\frac{r}{-30}\right) < 1.8 \quad (-30)$$

$$r > -54$$



Directions: Describe and correct the error in solving the inequality.

$$15) \frac{x}{9} \leq -7$$

$$9 \cdot \frac{x}{9} \leq -7 \cdot 9$$

$$x \leq -63$$

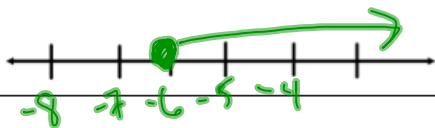
they reversed signs but did not divide by a negative #.

Directions: Write the verbal sentence as an inequality. Then solve the inequality and graph your solution.

16) The product of -15 and y is less than or equal to 90.

$$-15y \leq 90$$

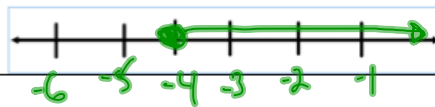
$$y \geq -6$$



17) The quotient of w and 24 is greater than or equal to $-\frac{1}{6}$.

$$\frac{w}{24} \geq -\frac{1}{6}$$

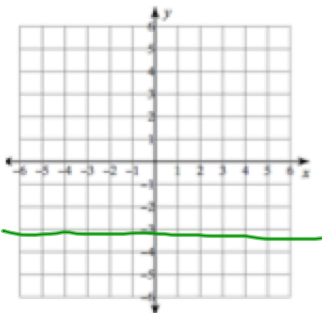
$$w \geq -4$$



Skillz Review

Graph the line.

$$1) x = -3$$



Evaluate.

$$2) b^3 - a^2, \text{ when } a = 4 \text{ and } b = 3$$

$$(3)^3 - (4)^2$$

$$27 - 16$$

$$11$$

Solve.

$$3) 95 = 5(7 + 3b)$$

$$95 = 35 + 15b$$

$$\frac{60}{15} = \frac{15b}{15}$$

$$4 = b$$