

Warm-Up

February 23, 2017

Solve and Graph

$$\overset{(20)}{-\frac{2x}{4}} + \overset{(20)}{\frac{6}{5}} \leq \overset{(20)}{\frac{5}{4}} \quad \text{LCM}$$

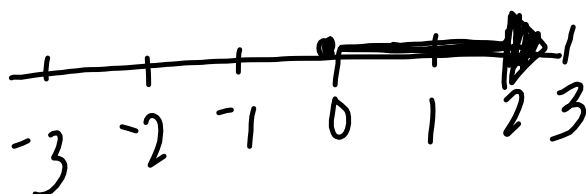
$$-\frac{40x}{4} + \frac{120}{5} \leq \frac{100}{4}$$

$$-10x + 24 \leq 25$$

-0.1

$$-10x + 24 - 24 \leq 25 - 24$$

$$\frac{-10x}{-10} \leq \frac{1}{-10} \quad \leftarrow \text{Last step!}$$



$$x \geq -\frac{1}{10}$$

$$x \geq -0.1$$

2. A taxicab charges \$2.50, plus \$1.78 per kilometre. \swarrow identifies the variable

A. Write a "let" statement.

Let "d" represent distance
Let "k" represent kilometers

B. Write an equation for the cost of the taxi ride.

$$\begin{aligned} C &= 2.50 + 1.78d \quad d = 10 \text{ km} \\ C &= 2.50 + 1.78(10) \\ C &= 2.5 + 17.80 \end{aligned}$$

$$d = 3 \text{ km} \quad C = \frac{2 + 3d}{2 + 3(3)}$$

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3. State 3 values of the variable that satisfy each inequality.

a) $c < 7$

4, -4.2, 0

b) $a \geq -3$

-3, 0, 4.2

c) $5 < n$

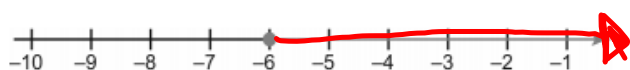
$n > 5$
10, 62, 512

d) $-1 \geq y$

$y \leq -1$
-10, -4.2, -1

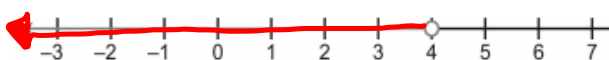
4. Write the inequality that is graphed on each number line.

a)



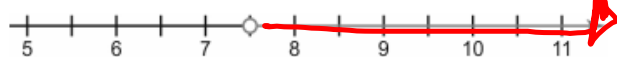
$x \geq -6$

b)



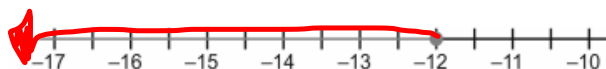
$x < 4$

c)



$x > 7.5$

d)



$x \leq -12$

3. Write an inequality to describe each situation, then graph it.

- a) The gas tank in a car contains no more than 55 L of gas.

Let "L" equal litres of gas

$$\underline{L \leq 55}$$



- b) The minimum age you must be to watch the movie is 13.

$$\underline{a \geq 13}$$



Let "a" equal age.

Skateboards can be rented from two shops in a park.

Shop Y charges \$15 plus \$3 per hour

Shop Z charges \$12 plus \$4 per hour

A. Write a "let" statement to represent the variable

Let "h" represent hours.

B. write an expression for each shop

Shop Y $15 + 3h$

Shop Z $12 + 4h$

C. Determine the number of hours that will make the cost of shop Y equal to shop Z

shop Y = shop Z

$$15 + 3h = 12 + 4h$$

$$15 + 3h - 4h = 12 + \boxed{4h - 4h}$$

$$15 - 1h = 12$$

$$\boxed{15 - 15} - 1h = 12 - 15$$

$$\begin{array}{r} -1h = -3 \\ \hline -1 \quad -1 \end{array}$$

$$h = 3$$

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3, 9 [a,c,e], 11 [a,c], 12 [a,c], 17 [b]

Test Practice

Textbook--- Page 308

3, 4, 7

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8, 10, 11, 12, 15,16

Practice Test

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