

Warm-Up

February 19, 2020

Solve and Graph

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

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

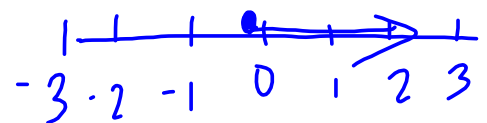
$$-10x + \boxed{-24} \leq 25^{-24}$$

$$-10x \leq 1$$

$$\frac{-10}{-10} \downarrow \frac{-10}{-10}$$

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

$$x \geq -0.1$$



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

A. Write a "let" statement.

*Let "d" represent distance*

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

$$C = 2.50 + 1.78d$$

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

*no equal sign*  
 Y  $15 + 3h$   
 Z  $12 + 4h$

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

$$\begin{aligned}
 Y &= Z \\
 15 + 3h &= 12 + 4h \\
 15 - 1h &= 12 \\
 \frac{-1h}{-1} &= \frac{-3}{-1} \\
 h &= 3
 \end{aligned}$$

Your parents are celebrating their 25th wedding anniversary. They have compared the rates at two banquet halls. Fancy Feast charges \$200 for the hall plus \$30 per person. Beautiful Banquet charges \$400 for the hall plus \$20 per person.

a) Write a "let" statement.

Let "p" represent # of people

b) Write an expression for the cost of:

Beautiful Banquet  $400 + 20p$

Fancy feast  $200 + 30p$

c) How many people will have to attend to make company Beautiful Banquet less expensive than company Fancy Feast?

$$\begin{aligned}
 & BB < FF \\
 & 400 + 20p < 200 + 30p \\
 & \overset{400}{400} - \overset{30p}{10p} < \overset{400}{200} \\
 & \frac{-10p}{-10} < \frac{-200}{-10} \\
 & p > 20
 \end{aligned}$$

Page 305

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

#10 [a,b]

Worksheet 10-16 Graph sheet work on your paper