

Solve the proportion

1.  $\frac{x-4}{5x} = \frac{3}{10}$

$x = -8$

Simplify

2.  $70 - (4 + 9 \div 3)^2$

$21$

Solve the equation. Use properties of equality to justify each step.

3.  $\frac{x}{7} - 11 = -8$

$x = 21$

4.  $3(x - 6) + 2 = 20$

$x = 12$

4. We need to make a bunch of Gatorade to fill a 5-gallon jug for the family fun night being held tomorrow night.

- Mrs. Pischke brought me 224 oz. that she made from home.
- Mr. Sacco gave me his leftover 22 pints from cross-country practice.
- If Mr. Belby already has 0.75 gallons made here at school, is there enough to fill the jug?
  - a. If not, how much are we short?
  - OR
  - b. If we have enough, do we have any extra? How much?

5. Last night Mrs. Pischke went on a shopping spree on the App Store on her new iPhone 6. She purchased songs for \$1.29 each and games for \$2.99. Write an explanation of what each piece of the expression means in context of the problem.

$$1.29s + 2.99g$$

1.29 \_\_\_\_\_

2.99g \_\_\_\_\_

1.29s + 2.99g \_\_\_\_\_

} see teacher  
for  
answers

6. After school today Mr. Belby goes to Peachwave to buy froyo at \$0.36 per ounce with a bottle of water for \$1.85. Write an explanation of what each piece of the expression means in context of the problem.

$$0.36m + 1.85$$

m \_\_\_\_\_

0.36 \_\_\_\_\_

0.36m \_\_\_\_\_

} see teacher  
for  
answers

The following inequality represents my trip to the pet store to buy cat food and litter.

$$8.99L + 0.48C \leq 50$$

Match the following with their meaning in context of the situation:

B 7. 8.99

D 8. C

F 9. 50

C 10. 8.99L

- a. The total cost of the items
- b. The cost per container of cat litter
- c. The total cost of litter
- d. The number of containers of cat litter purchased
- e. The number of cans of cat food purchased
- f. The amount of money you have to spend