$\qquad$
$\qquad$

Solve the proportion

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

## Simplify

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

Solve the equation. Use properties of equality to justify each step.
3. $\frac{x}{7}-11=-8$
4. $3(x-6)+2=20$
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.
$1.29 s+2.99 g$
1.29 $\qquad$
2.99g $\qquad$
$1.29 \mathrm{~s}+2.99 \mathrm{~g}$ $\qquad$
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.

## $0.36 m+1.85$

m $\qquad$
0.36 $\qquad$
0.36 m $\qquad$

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

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

Match the following with their meaning in context of the situation:
$\qquad$ 7. 8.99
a. The total cost of the items
$\qquad$ 8. $C$
b. The cost per container of cat litter
_ 9. 50
c. The total cost of litter
_- 10. 8.99 L
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

