

Lesson 17 Practice Problems

1. The equation $c = 2.95g$ shows how much it costs to buy gas at a gas station on a certain day. In the equation, c represents the cost in dollars, and g represents how many gallons of gas were purchased.
 - a. Write down at least four (gallons of gas, cost) pairs that fit this relationship.
 - b. Create a graph of the relationship.
 - c. What does 2.95 represent in this situation?
 - d. Jada's mom remarks, "You can get about a third of a gallon of gas for a dollar." Is she correct? How did she come up with that?

2. There is a proportional relationship between a volume measured in cups and the same volume measured in tablespoons. 3 cups is equivalent to 48 tablespoons, as shown in the graph.

- Plot and label at least two more points that represent the relationship.
- Use a straightedge to draw a line that represents this proportional relationship.
- For which value y is $(1, y)$ on the line you just drew?
- What is the constant of proportionality for this relationship?
- Write an equation representing this relationship. Use c for cups and t for tablespoons.

