## Unit 5, Lesson 12 <br> Practice Problems

1. a. A cookie recipe uses 3 cups of flour to make 15 cookies. How many cookies can you make with this recipe with 4 cups of flour? (Assume you have enough of the other ingredients.)
b. A teacher uses 36 centimeters of tape to hang up 9 student projects. At that rate, how much tape would the teacher need to hang up 10 student projects?
2. Evaluate each expression. When the answer is not a whole number, write your answer as a fraction.
a. $-4 \cdot-6$
b. $-24 \cdot \frac{-7}{6}$
c. $4 \div-6$
d. $\frac{4}{3} \div-24$
3. Some boats were traveling up and down a river. A satellite recorded the movements of several boats.
a. A motor boat traveled -3.4 miles per hour for 0.75 hours. How far did it go?
b. A tugboat traveled -1.5 miles in 0.3 hours. What was its velocity?
c. What do you think that negative distances and velocities could mean in this situation?
4. Describe a situation where each of the following quantities might be useful.
a. -20 gallons per hour
b. -10 feet per minute
c. -0.1 kilograms per second
5. A submarine is only allowed to change its depth by rising toward the surface in 60-meter stages. It starts off at -340 meters.
a. At what depth is it after:
i. 1 stage
ii. 2 stages
iii. 4 stages
b. How many stages will it take to return to the surface?
