

Lesson 10 Practice Problems

1. A slug travels 3 centimeters in 3 seconds. A snail travels 6 centimeters in 6 seconds. Both travel at constant speeds. Mai says, “The snail was traveling faster because it went a greater distance.” Do you agree with Mai? Explain or show your reasoning.

2. If you blend 2 scoops of chocolate ice cream with 1 cup of milk, you get a milkshake with a stronger chocolate flavor than if you blended 3 scoops of chocolate ice cream with 2 cups of milk. Explain or show why.

3. There are 2 mixtures of light purple paint.
 - Mixture A is made with 5 cups of purple paint and 2 cups of white paint.
 - Mixture B is made with 15 cups of purple paint and 8 cups of white paint.

Which mixture is a lighter shade of purple? Explain your reasoning.

4. Tulip bulbs are on sale at store A, at 5 for \$11.00, and the regular price at store B is 6 for \$13. Is each store pricing tulip bulbs at the same rate? Explain how you know.

5. A plane travels at a constant speed. It takes 6 hours to travel 3,360 miles.
 - a. What is the plane’s speed in miles per hour?
 - b. At this rate, how many miles can it travel in 10 hours?

(From Unit 2, Lesson 9.)

6. A pound of ground beef costs \$5. At this rate, what is the cost of:

- a. 3 pounds?
- b. $\frac{1}{2}$ pound?
- c. $\frac{1}{4}$ pound?
- d. $\frac{3}{4}$ pound?
- e. $3\frac{3}{4}$ pounds?

(From Unit 2, Lesson 8.)

7. In a triple batch of a spice mix, there are 6 teaspoons of garlic powder and 15 teaspoons of salt. Answer the following questions about the mix. If you get stuck, create a double number line.

- a. How much garlic powder is used with 5 teaspoons of salt?
- b. How much salt is used with 8 teaspoons of garlic powder?
- c. If there are 14 teaspoons of spice mix, how much salt is in it?
- d. How much more salt is there than garlic powder if 6 teaspoons of garlic powder are used?

(From Unit 2, Lesson 7.)