

Section 8.3 Math Link

This worksheet will help you with the Math Link on page 321.

One serving of a breakfast mixture consists of 200 mL of a corn bran cereal and 250 mL of 2% milk. Two servings of the mixture provide 1.4 mg of thiamin. If 250 mL of 2% milk provides 0.1 mg of thiamin, what mass of thiamin is in 200 mL of the cereal?

- a) What is the quantity of thiamin in one serving of cereal and milk?
- b) What amount of thiamin does 250 ml of milk provide?
- c) Write an equation that models the situation. Use c to represent the amount of thiamin in one serving of cereal. Use the amount you calculated in part a) to represent the total thiamin in one serving of cereal and milk. Use the amount in part c) to represent the amount of thiamin in one serving of milk.
- d) Solve your equation to determine the mass of thiamin in 200 mL of the cereal. Mark units of thiamin in milligrams (mg).
- e) Rewrite the equation in a different way. Use the same letter to represent the cereal. Solve your equation and mark units in milligrams.
- f) Which of your solution methods do you prefer? Explain which method worked better for you to solve for the unknown amount.