Name: _____ Date: _____

BLM 8–13

Section 8.4 Math Link

This worksheet will help you with the Math Link on page 329.

The mass of riboflavin in one small serving (75 g) of raw almonds is 0.87 mg less than the mass of riboflavin in $2\frac{1}{2}$ small servings of raw almonds. What is the mass of riboflavin in one small serving of raw almonds?

a) Write an equation that models the situation.

Let *m* represent the mass of riboflavin in one small serving of almonds. This is the value you want to find.

If one serving can be shown as *m*, then $2\frac{1}{2}$ servings can be written as

_____*m*.

How many milligrams less is the amount of riboflavin in one serving than in $2\frac{1}{2}$ servings?

Now, create an equation that uses the variable *m* to show the relationship between the amount of riboflavin in one serving and the amount in 2.5 servings.

b) Solve the equation from part a) by using Guess and Check.

To solve using Guess and Check, you will need to estimate and then substitute your best guess into the equation. You will then see if you have found the correct number or if you are getting close to it.

Here is an example using a different equation: $f \div 34 = 5$.

To Guess and Check, you would need to estimate the amount that 34 x 5 would be.

34 is close to 30.
$30 \times 5 = 150$

So, you might guess that the unknown *f* is a bit bigger than 150.

Check by substituting your guess into the equation.

Left Side = $150 \div 34$ Right Side = 5
= _____

Is your estimate close?

Keep guessing and checking until you have the correct number.

Make three estimates and put each of these into your equation from part a). How close did you come to finding the answer?

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c) Solve the equation you created in part a) by isolating the variable.

Treat the equal sign in your equation like a wall. Whatever you do on one side of the wall, you will have to do on the other side. To isolate the variable, you need to use +, −, ×, or ÷ so that your variable is alone on one side of the wall.

Solve for the value of *m*. Write a solution statement: The mass of riboflavin in one small serving of raw almonds is _____ mg.

d) Which of these solution methods do you prefer? Explain why?