Name: _____ Date: _____

BLM 8–7

Section 8.1 Math Link

This worksheet will help you with the Math Link on page 303.

Solve parts a) and b) in at least two different ways. Write and solve an equation as one of the methods for each part. Share your solutions with your classmates.

Three dried figs contain about 1.2 mg of iron.

a) What is the mass of iron in one dried fig?

What math operation (+, −, ×, ÷) will help you to find the amount in one fig if three figs = 1.2 mg?

Write an equation that uses a variable, *f*, to represent the value of $\frac{1}{3}$ of 1.2 mg. Solve your equation.

b) Teenagers need about 12 mg of iron per day. How many dried figs would you have to eat to get your recommended daily amount of iron?

How much iron is in one dried fig? This is the unit rate of iron for each fig. Write an equation that determines the number figs at the unit rate that will result in an amount of 12 mg of iron. Use *n* to represent the number of figs. Solve your equation.

c) Write a formula that relates the mass of iron to the number of figs.

Use your unit rate of iron for each fig. Use the variable, *n*, to represent the number of figs, and the letter *I* to represent the mass of iron.

Write an equation that can be used to calculate the mass of iron in any number of figs.

Use your equation to calculate the mass of iron in eight figs.

d) Use your formula in part c) to determine the number of figs, *n*, that contain 1.8 mg of iron.

You know the value of *I*. Solve for the unknown variable, *n*.