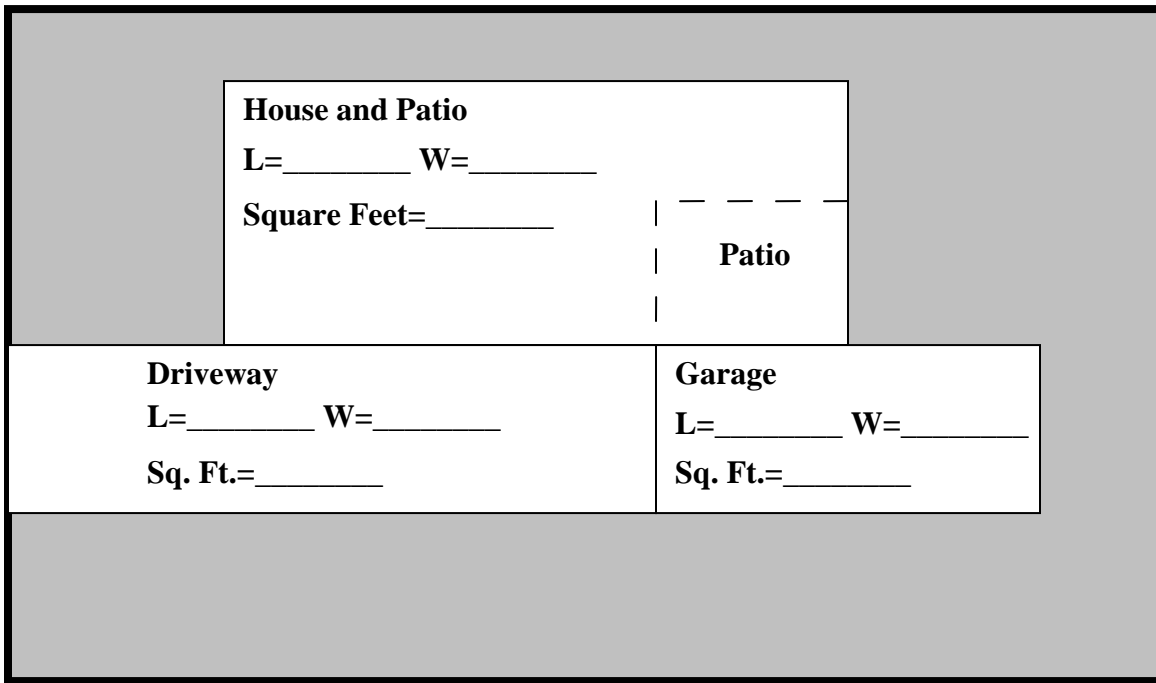


## Agriculture Measures Up

You are landscaping your lawn and need to buy enough fertilizer to cover your lawn. One bag of fertilizer will cover 500 square feet. You must determine how many bags of fertilizer are needed to cover the shaded area (grass). The diagram below shows the layout of your house lot. The large, bold line indicates your house lot. Within your house lot, a diagram of your home, driveway, garage, and patio is shown. Using a ruler and diagram below, measure the length and width of the house lot, house and patio, driveway, and garage. Record your answers in the appropriate places on each of the diagrams. Based on your calculation, how many bags of fertilizer do you need to buy?

The scale used in these diagrams is 1 inch = 10 feet. All measurements should be read to the nearest one-half inch.

House Lot L=\_\_\_\_\_ W=\_\_\_\_\_ Square Feet=\_\_\_\_\_



**Show All Work**

- 1. How many square feet are in the house lot altogether? Explain how you got your answer.**
  
  
  
  
  
  
  
  
  
  
- 2. How many square feet are covered by the house and patio?**

- 3. How many square feet are covered by the garage? Is this area greater or less than the house and patio?**
  
  
  
  
  
  
  
  
  
  
- 4. How many square feet are covered by the driveway?**
  
  
  
  
  
  
  
  
  
  
- 5. How many square feet do the house and patio, garage, and driveway cover?**
  
  
  
  
  
  
  
  
  
  
- 6. How much square footage of the house lot is left for grass? Explain how you got this answer.**
  
  
  
  
  
  
  
  
  
  
- 7. How many bags of fertilizer are needed to cover the shaded area (grass)?**

**When you have found your answer, use colored pencils or crayons to landscape your yard.**

## **Answer Key for Agriculture Measures Up:**

1. How many square feet are in the house lot?

**Answer = 2,100 sq. ft.**

2. How many square feet are covered by the house and patio?

**Answer = 525 sq. ft**

3. How many square feet are covered by the garage?

**Answer = 200 sq. ft.**

4. How many square feet are covered by the driveway?

**Answer = 350 sq. ft.**

5. How many square feet do the house and patio, garage, and driveway cover?  
(2, 3, and 4 above)

**Answer = 1, 075 sq. ft.**

6. How many square feet of the house lot are left for grass?

**Answer = 1,025 sq. ft.**

7. How many bags of fertilizer are needed to cover your number of square feet of grassed area?

**Answer = 3 bags**

This activity was adapted from the Soil mAGic Kit, Math – Lesson #5.

Learning Standards: 6.A.2; 6.B.2; 6.B.3a; 6.C.2a; 6.C.3a; 6.C.2b6.C.3b; 7.A.2a; 7.A.3b;7.B.3; 7.C.2a; 7.C.3b;

Assessment Framework: 6.5.12; 6.6.12; 6.7.08; 6.8.09; 6.8.13; 6.5.18; 6.6.19; 7.5.03; 7.6.01; 7.6.02; 7.5.07; 7.6.06; 7.7.06;