Lesson 3 Practice Problems

1. List the *sample space* for each chance experiment.

    a. Flipping a coin

    b. Selecting a random season of the year

    c. Selecting a random day of the week

2. A computer randomly selects a letter from the alphabet.

    a. How many different outcomes are in the sample space?

    b. What is the probability the computer produces the first letter of your first name?

3. What is the probability of selecting a random month of the year and getting a month that starts with the letter "J?" If you get stuck, consider listing the sample space.

4. E represents an object's weight on Earth and M represents that same object's weight on the Moon. The equation $M = \frac{1}{6}E$ represents the relationship between these quantities.

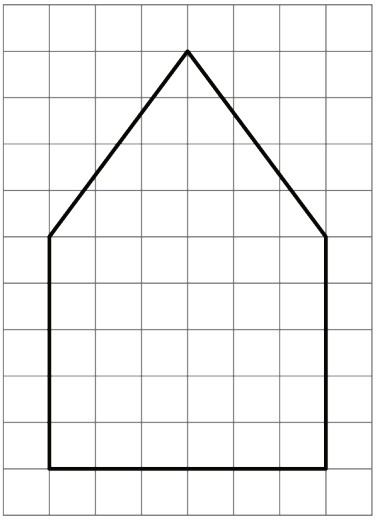
   a. What does the $\frac{1}{6}$ represent in this situation?

   b. Give an example of what a person might weigh on Earth and on the Moon.

(From Unit 2, Lesson 4.)

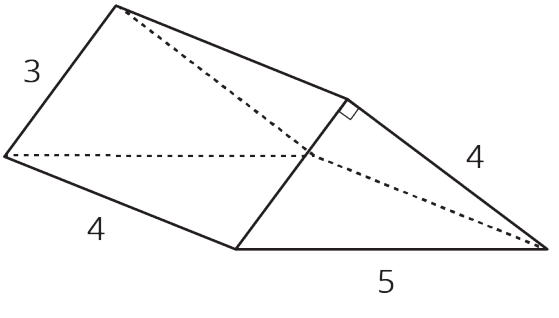
5. Here is a diagram of the base of a bird feeder which is in the shape of a pentagonal prism. Each small square on the grid is 1 square inch.

   The distance between the two bases is 8 inches. What will be the volume of the completed bird feeder?



(From Unit 7, Lesson 13.)

6. Find the surface area of the triangular prism.



(From Unit 7, Lesson 14.)