Class 1: Some Warm-Up Group Exercises

1. Introduce yourself to the other members of your group.

2. How many centimeters are in a meter?

3. How many square centimeters are in a square meter?

4. How many square centimeters are in 314 square meters?

5. Convert 65 miles per hour to meters per second.

6. A tofu mishap occurs in the dining hall and a work-study student is exposed to nasty soy chemicals which cause her to shrink by a factor of 2. I.e., she’s now half as tall, half as wide, etc.
   (a) By what factor has her volume decreased?
   (b) By what factor has her surface area decreased?
   (c) By what factor has her mass decreased?

7. What is the meaning or interpretation of the number $\frac{465}{23}$?

8. At A&B Naturals 3 pounds of lentils cost 5 dollars. Answer the following questions using plain, everyday language. Try not use the word “per”.
   (a) What is the meaning or interpretation of the number $\frac{5}{3}$?
   (b) What is the meaning or interpretation of the number $\frac{3}{5}$?
   (c) How much do 11 pounds of lentils cost?
   (d) How many pounds of lentils can you get for 11 dollars?