

## 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  $465/23$ ?
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  $5/3$ ?
  - (b) What is the meaning or interpretation of the number  $3/5$ ?
  - (c) How much do 11 pounds of lentils cost?
  - (d) How many pounds of lentils can you get for 11 dollars?