

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. Give an operational definition of area.
5. 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?
6. At the alternative market, 3 pounds of lentils cost 5 dollars. Answer the following questions using plain, everyday language. Do not use the word "per".
 - (a) What is the meaning of the number $5/3$?
 - (b) What is the meaning 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?