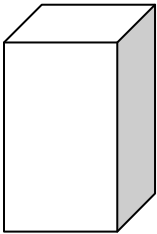


Mr. Z's Volume of a Regular Solid Worksheet

P1

What is the length of this line: to the nearest mm _____ to nearest 0.1cm _____
to the nearest whole cm _____

Box 1



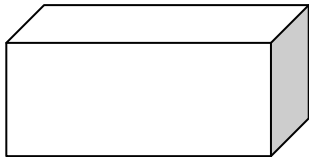
What is the length of the height of the box to the nearest whole cm?

What is the length of the width of this box to the nearest whole cm?

What is the depth of this box to the nearest whole cm?

What is the volume of this box?

Box 2



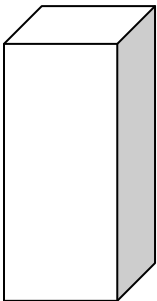
What is the length of the height of the box to the nearest whole cm?

What is the length of the width of this box to the nearest whole cm?

What is the depth of this box to the nearest whole cm?

What is the volume of this box?

Box 3



What is the length of the height of the box to the nearest whole cm?

What is the length of the width of this box to the nearest whole cm?

What is the depth of this box to the nearest whole cm?

What is the volume of this box?

Going Further

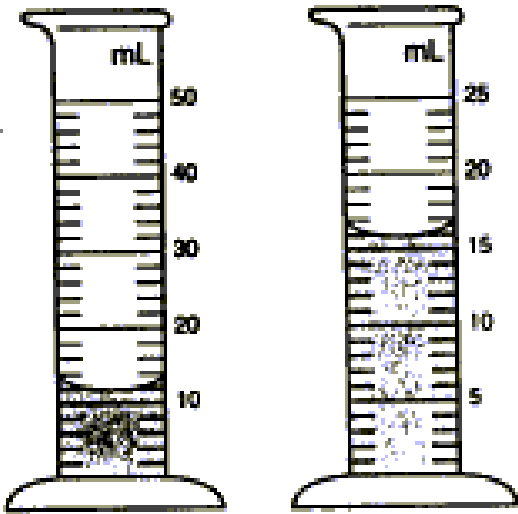
Convert all of the above measurement to the nearest whole mm. Hint: to calculate volume, you must do the length, width, and depth conversions first, before you multiply.

Calculate the area of the following problems.

1. A box whose length is 5 cm, whose width is 2 cm and whose depth is 1 cm.
2. A box whose length is 10 cm, whose width is 6 cm and whose depth is 2 cm.
3. An box whose length is 10 cm, whose width is 6.5 cm whose depth is 2 cm.
4. A book whose length is 30 mm, whose width is 20 mm and whose depth is 10 mm.
5. A book whose length is 20 cm, whose width is 15 cm and whose depth is 4 cm.
6. A book whose length is 300 mm, whose width is 15 cm and whose depth is 20 mm.
7. The volume of a room whose length is 10 m, whose width is 5 m and whose height is 3 m.
8. Which room occupies more volume: the first room is 7 m long by 5 m wide; the second room is 8 m long by 4.5 m wide. Both rooms are 3 m in height.
9. A dumpster is 10 meters in length, 4 meters in width and 2 meters in height. What is the volume of the dumpster?
10. What is larger 10 m^3 or 10 yd^3 . Explain why.

Mr. Z's Graduated Cylinder Worksheet

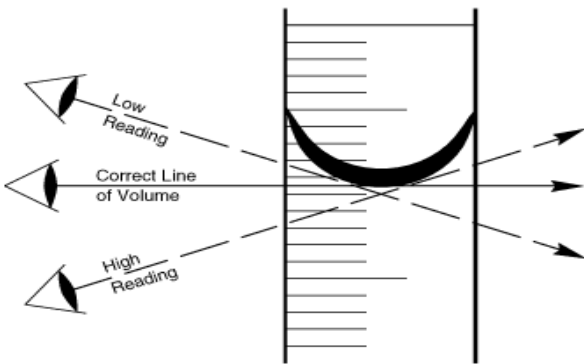
P3



It is important to remember to read to the bottom of the curved line or **meniscus** when measuring solutions involving water or most liquids.

The graduated cylinder at the left is divided into increments of 2 ml, so the volume in it is 12 ml.

The graduated cylinder on the right is divided into increments of 1 ml, so the volume in it is 16 ml.



When measuring liquid volume it is important to read the graduated cylinder correctly. Your eye should be level with the top of the liquid and you should read the bottom of the meniscus.

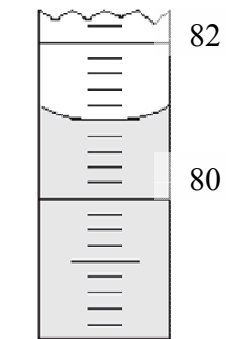
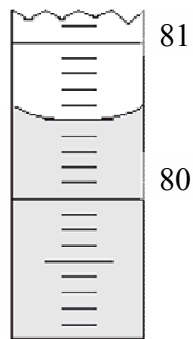
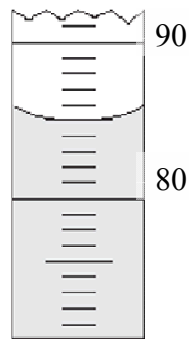
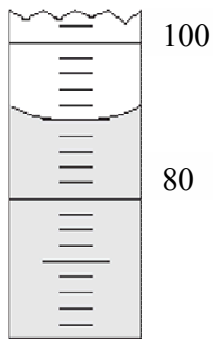
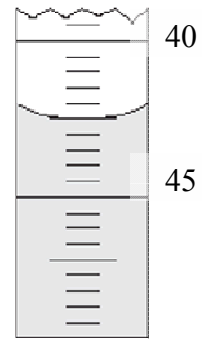
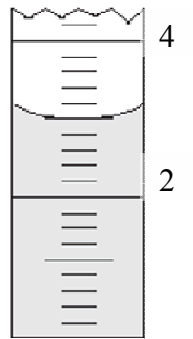
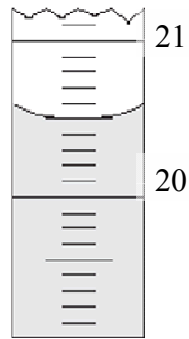
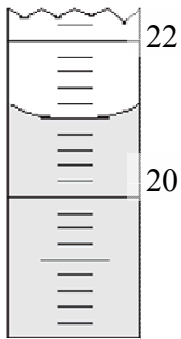
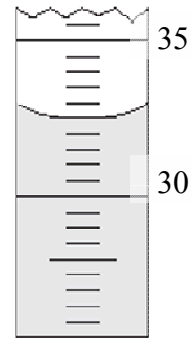
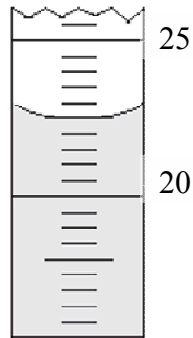
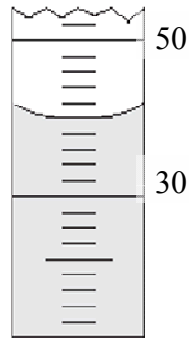
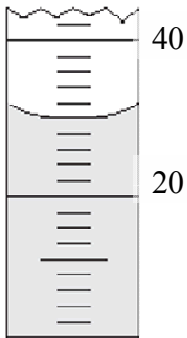
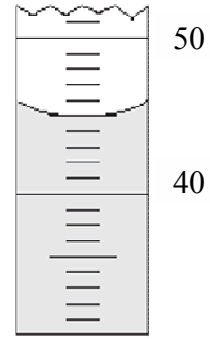
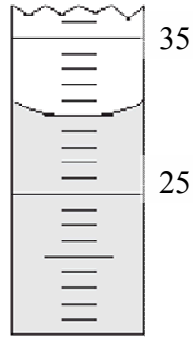
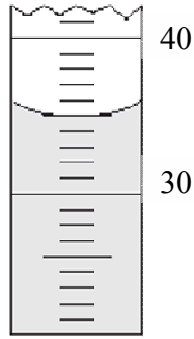
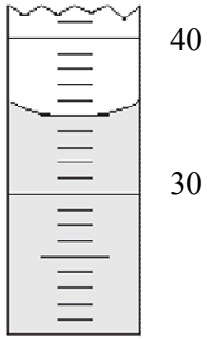
Fill-in the Blanks:

1. A _____ is used to measure the volume of a liquid.
2. The standard unit of measure in the metric system for liquids is the _____.
3. Small s of liquid are measured in these units: _____
4. Large amounts of liquid are measured in these units: _____
5. 1000 ml equals ___ liter.
6. 1000 ml also equals _____ .
7. What must be read very carefully when reading the liquid in a graduated cylinder?
8. What is the FIRST thing you have to determine when using a graduated cylinder?
9. A graduated cylinder must be read at ___ level.

Examine each picture of a partial graduated cylinder, and determine its volume in ml.

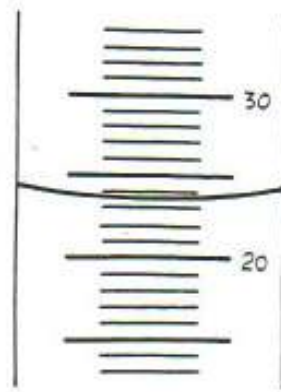
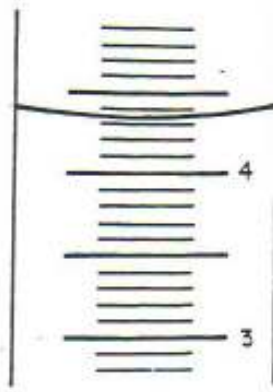
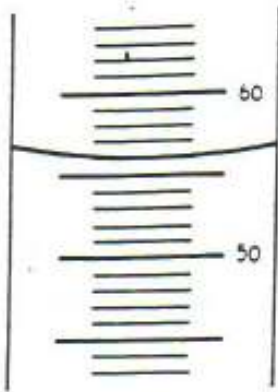
Mr. Z's Graduated Cylinder Worksheet

P4



What is the volume of each of the following Graduated Cylinders

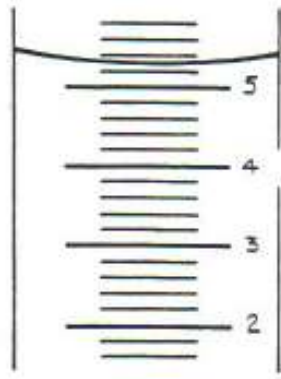
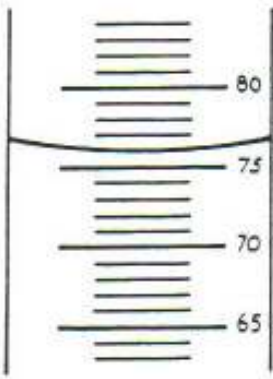
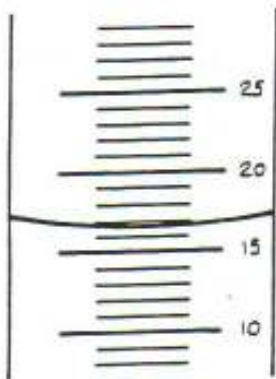
P5



a) _____

b) _____

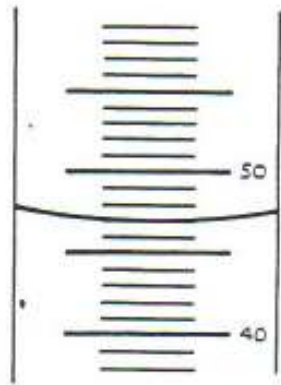
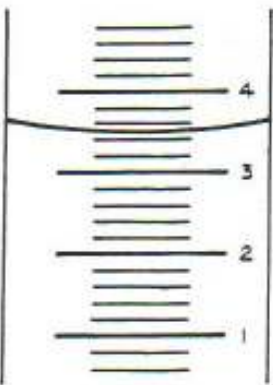
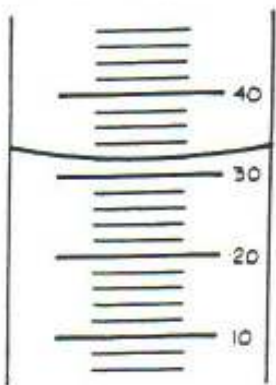
c) _____



d) _____

e) _____

f) _____



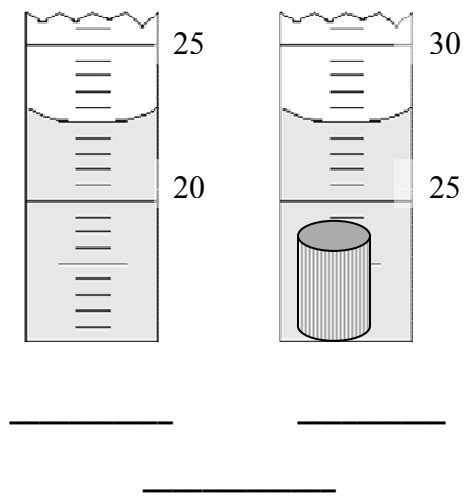
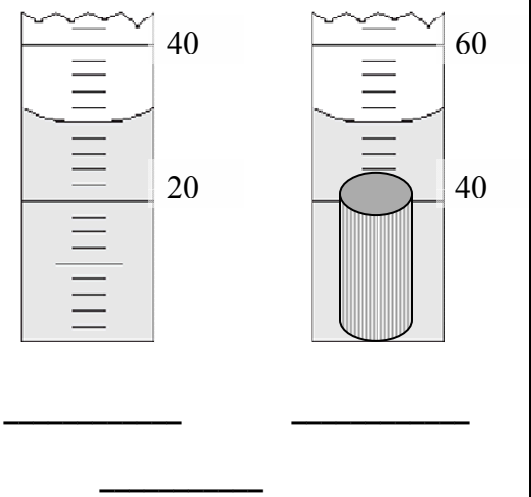
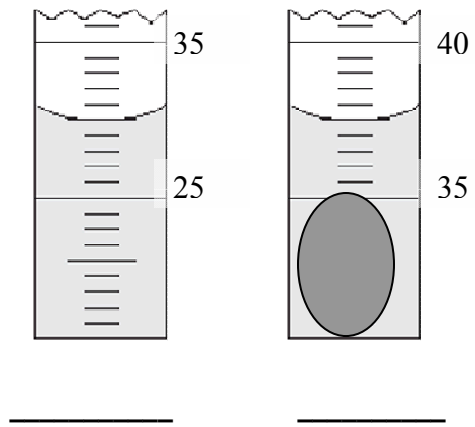
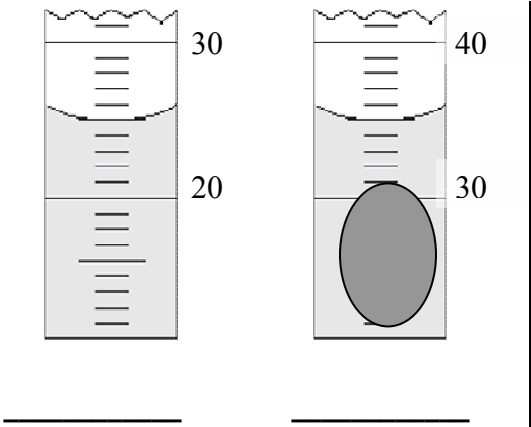
g) _____

h) _____

i) _____

Mr. Z's Water Displacement Method Worksheet P6

Directions: Examine the pairs of graduated cylinders. Calculate the volume of each in ml; and then determine the volume of the rock in the second graduated cylinder



Mr. Z's Water Displacement Method Worksheet P7

