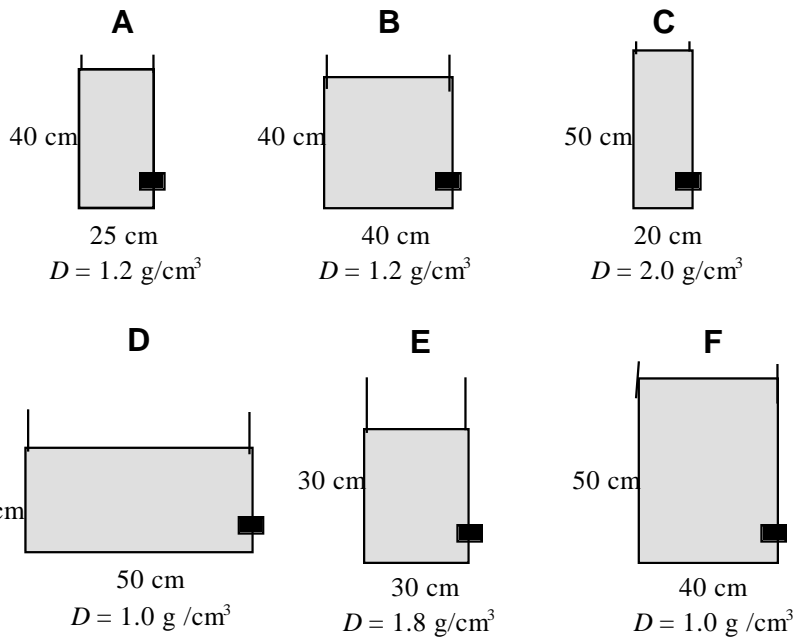


## Cylinders of Liquids—Pressure on the Plug II <sup>108</sup>

The figures below show side views of six hollow cylinders that have varying amounts of various liquids in them. The widths of the cylinders and the heights to which they have been filled with liquid vary. The densities of the liquids, the widths of the cylinders, and the heights to which the cylinders have been filled are given in each figure. The cylinders all have a hole cut in the side. All of the holes are the same size and they are all at the same height above the bases of the cylinders. There are corks in all of the holes.

Rank these situations from greatest to smallest on the basis of the pressure on the cork by the water.



Greatest    1\_\_\_\_\_ 2\_\_\_\_\_ 3\_\_\_\_\_ 4\_\_\_\_\_ 5\_\_\_\_\_ 6\_\_\_\_\_    Smallest

Or, the pressure on the cork by the water is the same for each case. \_\_\_\_\_

Please carefully explain your reasoning.

How sure were you of your ranking? (circle one)

Basically guessed

Sure

Very Sure

1      2      3      4      5      6      7      8      9      10

<sup>108</sup> D. Maloney, C. Hieggelke