

Problem statement A homogeneous liquid whose density is 300 kg/m^3 fills three buried containers. The containers, drawn below, are each 10 meters tall. The top of each container is at ground level. All three containers have the *same* volume. The middle container is a cylinder, and the other two are circular cones. Which container needs the *least* amount of work to empty (that is, to pump the liquid to ground level)? Which container needs the *most* work to empty? Justify your assertions by computing the work necessary in each case. You may also discuss *why* your answer is correct!

