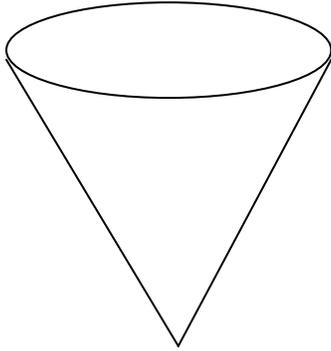


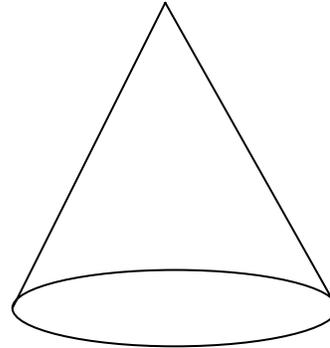
HOW MUCH WORK IS REQUIRED?

ConcepTest

A **right circular conical water tank** 10 feet high with a radius of 6 feet is buried with the narrow end down (**orientation #1**) so that the top of the tank is at ground level. The tank is full of water.



Orientation #1



Orientation #2

A certain amount of work is required to pump the water out of the water tank having **orientation #1** (up to ground level). If the tank were instead buried with the narrow end up (**orientation #2**), how much relative work would be done in pumping the full tank of water up to ground level?

In particular, when compared to the work required for orientation #1, the **work required to empty the water tank having orientation #2** would be:

CIRCLE ONE: **A. MORE** **B. LESS** **C. SAME AMOUNT**

Note: Please make a mathematical conjecture concerning the above question and do not perform any computations.