

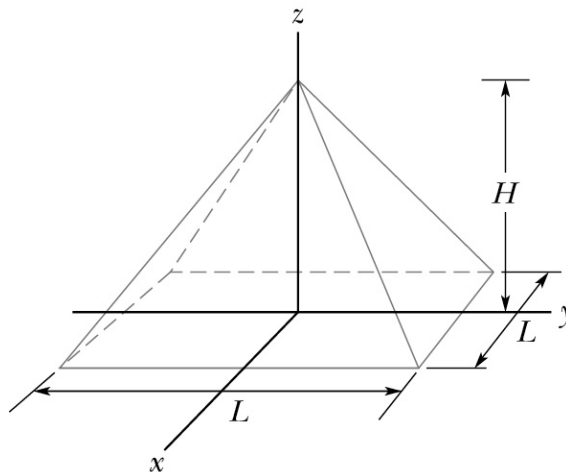
## Honors Physics - Quiz 2

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*You may consult your text – show all work on these sheets*

Name (please print) : \_\_\_\_\_



The pyramid shown above has a height  $H$  of 147 m and its base is a square with side  $L$  of 230 m. The volume is  $L^2H/3$  and the mass density is  $\rho = 1.8 \times 10^3 \text{ kg/m}^3$ .

- What is the height of the center of mass of the pyramid above its base?
- How much work was required to lift the mass into place from base level to form this pyramid?