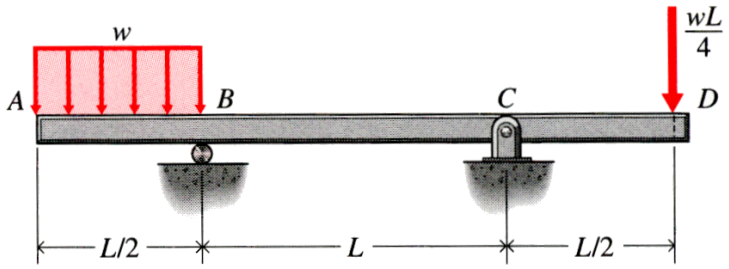
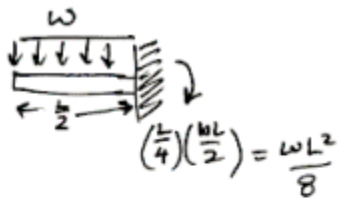
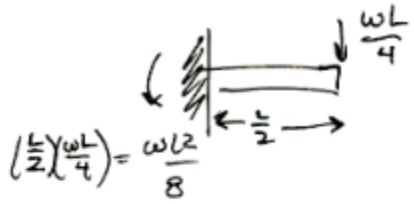
IDE 110 – Summer 2006 Quiz 27 **Name:**_____

Determine the deflection at a point midway between the supports of the beam shown in the figure below. *Show work clearly and put you answer in the box at the bottom of the page.*







$$y = \left[\frac{\left(\frac{wL^2}{8}\right)\left(\frac{L}{2}\right)}{6LEI} \left[2L^2 - 3L\left(\frac{L}{2}\right) + \left(\frac{L}{2}\right)^2 \right] \right] (2) = \frac{wL^4}{64EI}$$

$\delta =$