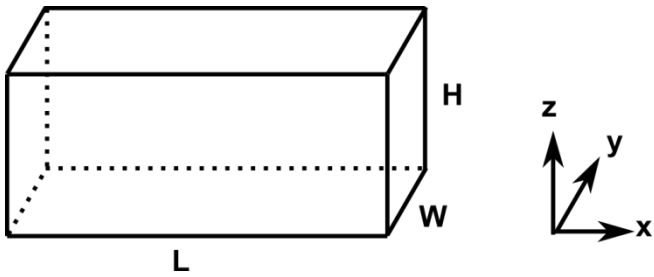


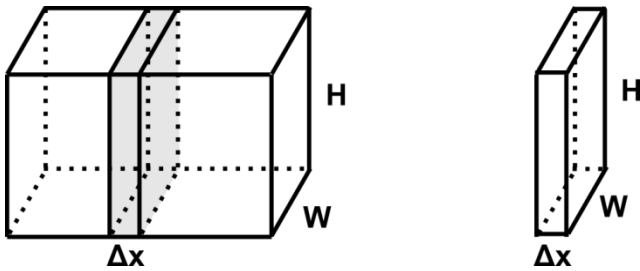
I. CARTESIAN (RECTANGULAR) COORDINATES



$$A_x = W \times H \quad A_y = L \times H \quad A_z = L \times W$$

$$V = L \times W \times H$$

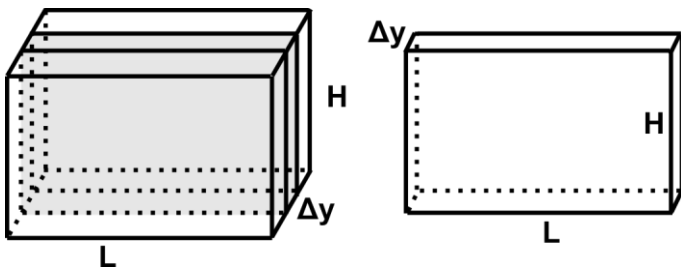
I.A. DIFFERENTIAL VOLUME ELEMENT OF Δx ($\Delta x, W, H$)



$$A_x = W \times H \quad A_y = \Delta x \times H \quad A_z = \Delta x \times W$$

$$V = \Delta x \times W \times H$$

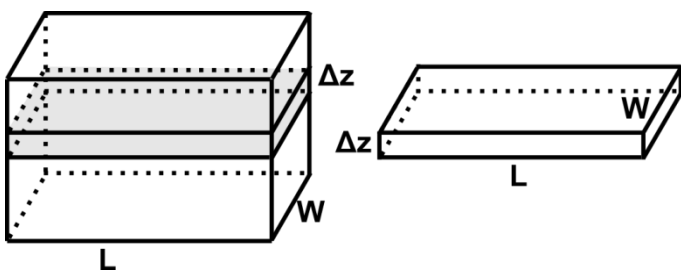
I.B. DIFFERENTIAL VOLUME ELEMENT OF Δy ($L, \Delta y, H$)



$$A_x = \Delta y \times H \quad A_y = L \times H \quad A_z = \Delta y \times L$$

$$V = L \times \Delta y \times H$$

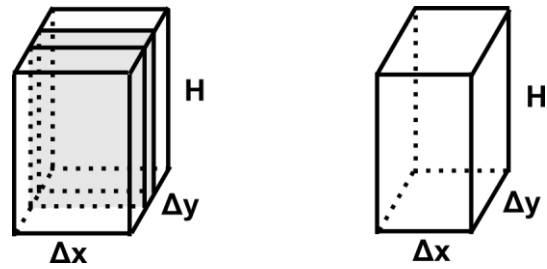
I.C. DIFFERENTIAL VOLUME ELEMENT OF Δz ($L, W, \Delta z$)



$$A_x = W \times \Delta z \quad A_y = L \times \Delta z \quad A_z = L \times W$$

$$V = L \times W \times \Delta z$$

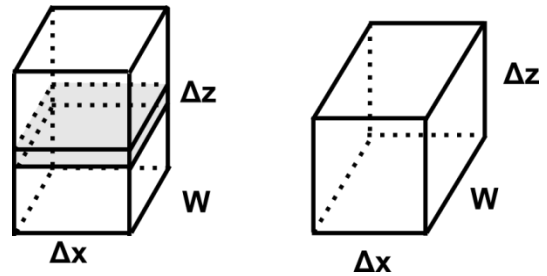
I.D. DIFFERENTIAL VOLUME ELEMENT OF $\Delta x, \Delta y$ ($\Delta x, \Delta y, H$)



$$A_x = \Delta y \times H \quad A_y = \Delta x \times H \quad A_z = \Delta x \times \Delta y$$

$$V = \Delta x \times \Delta y \times H$$

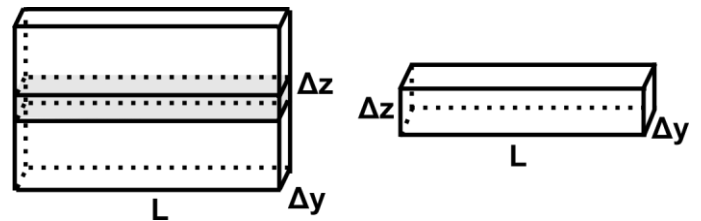
I.E. DIFFERENTIAL VOLUME ELEMENT OF $\Delta x, \Delta z$ ($\Delta x, \Delta z, W$)



$$A_x = W \times \Delta z \quad A_y = \Delta x \times W \quad A_z = \Delta x \times W$$

$$V = \Delta x \times W \times \Delta z$$

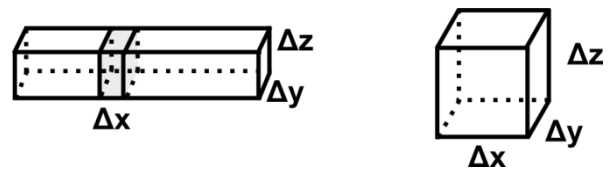
I.F. DIFFERENTIAL VOLUME ELEMENT OF $\Delta y, \Delta z$ ($\Delta y, \Delta z, L$)



$$A_x = \Delta y \times \Delta z \quad A_y = L \times \Delta z \quad A_z = \Delta y \times L$$

$$V = L \times \Delta y \times \Delta z$$

I.G. DIFFERENTIAL VOLUME ELEMENT OF $\Delta x, \Delta y, \Delta z$



$$A_x = \Delta x \times \Delta z \quad A_y = \Delta x \times \Delta z \quad A_z = \Delta x \times \Delta y$$

$$V = \Delta x \times \Delta y \times \Delta z$$