



NOMBRE: JOSE MIGUEL GARCÍA DOMINGUEZ

DOCENTE: ABEL ESTRADA DICI

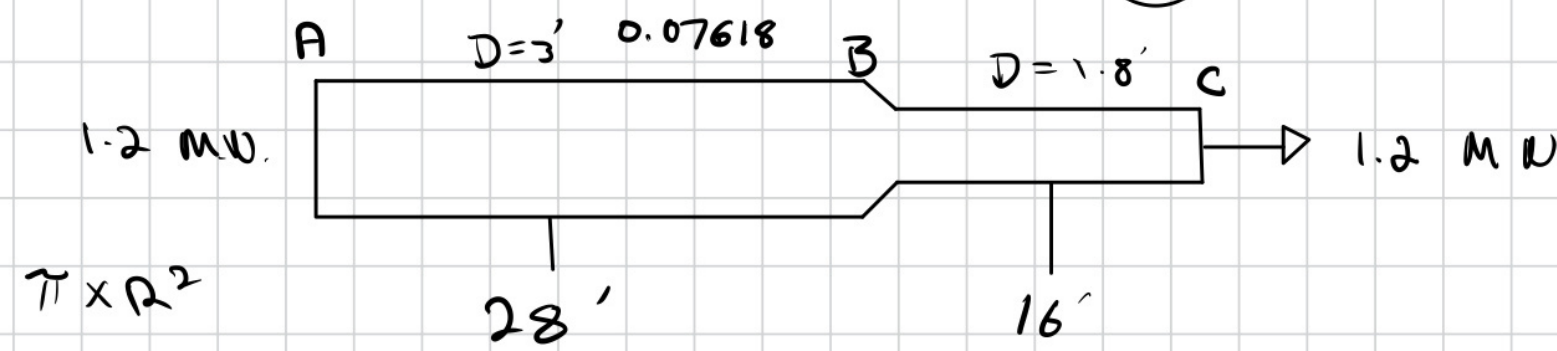
NOMBRE DEL TRABAJO: DEFORMACIONES

MATERIA: RESISTENCIA DE MATERIALES

GRADO: 4º

CARRERA: ARQUITECTURA

$$E = 40 \text{ GPa} \quad \text{Circular}$$



$$A_1 = \frac{\pi \times r^2}{2}$$

$$A_1 = \frac{\pi \times 0.03842^2}{2}$$

$$A_1 = 0.002379$$

$$P = \frac{1,200,000}{0.002379}$$

$$P = 504,413,619.2$$

$$P = \frac{504,413,619.2}{40,000,000,000}$$

$$E = 0.012610$$

$$\delta = 0.012610 \times 0.711048$$

$$\delta = 0.008967$$

$$\delta = 89.66$$

$$A_2 = \frac{\pi \times r^2}{2}$$

$$A_2 = \frac{\pi \times 0.022855^2}{2}$$

$$A_2 = 0.000821$$

$$P = \frac{1,200,000}{0.000821}$$

$$P = 1461632,156$$

$$P = \frac{1461632,15}{40,000,000,000}$$

$$E = 0.036541$$

$$\delta = 0.036541 \times 0.406313$$

$$\delta = 0.014847$$

$$\delta = 148.47$$

$$238.13$$