

{Question 1.26}

$$g=9.81[\text{m/s}^2]$$

$$A=0.01[\text{m}^2]$$

$$m=50[\text{kg}]$$

$$P_{\text{atm}}=1[\text{bar}]$$

$$P=P_{\text{atm}}+((m \cdot g)/A) \cdot \text{convert}(\text{Pa}, \text{bar}) \quad \{\text{Pressure: } P = 1.491 \text{ bar}\}$$

SOLUTION

Unit Settings: SI C kPa kJ mass deg

$$A = 0.01 \quad [\text{m}^2]$$

$$P = 1.491 \quad [\text{bar}]$$

$$g = 9.81 \quad [\text{m/s}^2]$$

$$P_{\text{atm}} = 1 \quad [\text{bar}]$$

$$m = 50 \quad [\text{kg}]$$

No unit problems were detected.