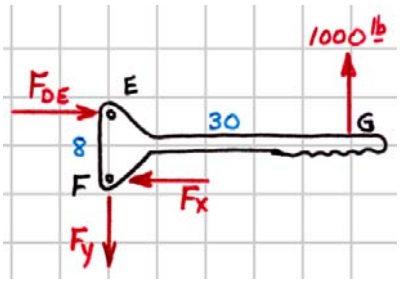
1-63



From a free-body diagram of the handle, the equations of equilibrium give

$$\circlearrowleft \Sigma M_F = 0: \qquad 30(1000) - 8F_{DE} = 0$$

$$F_{DE} = 3750 \text{ lb}$$

Since *DE* is a two-force member, the axial force on every cross section is the same

$P = 3750$ lb (C) ..... **Ans.**

and the shear force and the bending moment are both zero

$V = 0$ lb .....**Ans.**

$M = 0$ lb·ft .....**Ans.**