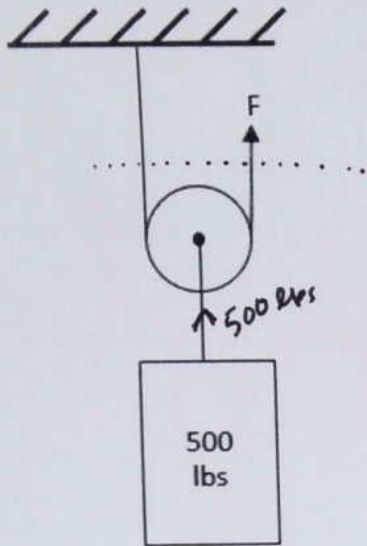


Calculate the force F needed to keep the pulley in equilibrium.



Tension = Constant

FBD of Pulley



$$\sum F_y = 0 = -500 + 2F$$

$$\boxed{F = 250 \text{ lbs}}$$