Free-Body Solutions: Rotational Equilibrium

Symbols: \( w \) = weight, \( T \) = tension, \( n \) = normal reaction force at surface, \( V \) = vertical reaction force at hinge, \( H \) = horizontal reaction force at hinge, \( f \) = friction.

RE-1

Use torque to find \( T \).

RE-2

RE-3

\( V = 3w \)

RE-4

\( V = 4w \)

RE-5

\( V = 4w \)

RE-6

\( V \)