

Physics 10154 - Quiz 8A

A vertical 7.2-kg flag pole of length 3.6 meters is shown below. At the base of the flag pole, there is a reaction force that has a vertical component (the normal force) and a horizontal component that points in the +x direction. 2.2 meters above ground, a thin string is tied to the flagpole, providing a tension force. 3.3 meters above ground, the wind is flapping the flag (which has negligible mass), providing a horizontally oriented applied force of 38 Newtons.

Determine the magnitude of the tension in the string, the normal force and the horizontal reaction force.

