## Using Triangulation



1. Height of my eye from the ground: $h_{1}=$ $\qquad$ m
2. Pace off your distance to the flagpole: $L=$ $\qquad$ m
3. Measure the angle on the protractor: $\mathbf{a}=$ $\qquad$ degrees
4. The angle from horizontal $=90^{\circ}-\mathrm{a}: \quad \mathrm{A}=$ $\qquad$ degrees
5. Tangent of angle $A: \tan A=$ $\qquad$
6. Distance from eye to top of flagpole $=L * \tan A: h_{2}=$ $\qquad$ m
7. Total height of flagpole $=h_{1}+h_{2}: \quad H=$ $\qquad$ m
