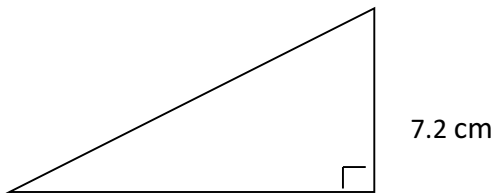


Determining Lengths of Sides in Right Triangles

Example 1: Determine the length of side x , to the nearest tenth.

Given $\triangle XYZ$, $z = 7.2 \text{ cm}$, $Z = 35^\circ$, $Y = 90^\circ$



Recall:

Angle of elevation/inclination is always measured UP from the HORIZONTAL.

Angle of depression always measured DOWN from the HORIZONTAL.

Example 2: Tanya is standing 7.92 m from the flagpole. She is holding a clinometer at eye level 1.6 m above the ground. How tall is the flagpole if she measures a 50° angle of elevation?