## Sec. 2.2 Notes - Using the Tangent Ratio to Calculate Lengths

1. Determine the length of $X Y$ to the nearest tenth of a centimetre.

2. Determine the length of $V X$ to the nearest tenth of a centimetre.

3. At a horizontal distance of 200 m from the base of an observation tower, the angle between the ground and the line of sight to the top of the tower is $8^{\circ}$. How high is the tower to the nearest metre? The diagram is not drawn to scale.


Life changing Math Tip** It is often convenient to use the lower case letter to name the side opposite a vertex of a triangle.

