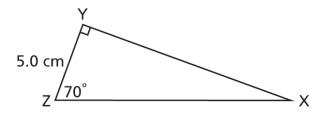
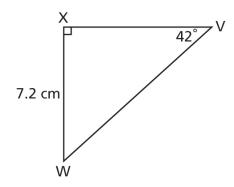
## Sec. 2.2 Notes – Using the Tangent Ratio to Calculate Lengths

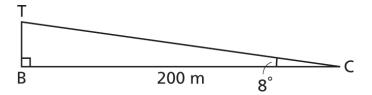
**1.** Determine the length of XY to the nearest tenth of a centimetre.



2. Determine the length of VX 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°. 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.