

Math Lab: Creating a Clinometer

Analysis **Possible Answers**

1. 90°
2. The angle of elevation, or x° in the diagram, would be 30° .
$$90^\circ - 60^\circ = 30^\circ$$
3. The parts of the triangle that will be known to the student are the base of the triangle and the angle of elevation.
4. $\tan x^\circ = \frac{\text{height}}{\text{base}}$
5. The student also needs to add the height up to the student's eye-level to the calculation in the previous question.