

# Measuring by Sight

*Short-answer measuring problems.*

## Instructions

Adjust the figures to fit the given conditions within **eyeball accuracy**. Enter the requested measurements.

**Problem 1** Geogebra link: <https://tube.geogebra.org/m/gjf28er6>

In figure above, when point  $C$  is adjusted so that  $\overline{BC}$  is perpendicular to  $\overline{AC}$ ,  $AC = \boxed{2.09}$ .

**Hint:** When two lines are perpendicular, they cross to create four congruent angles.

**Hint:** Use the corner of a piece of paper.

**Problem 2** Geogebra link: <https://tube.geogebra.org/m/a888zyw2>

In  $\triangle ABC$  above, the height to base  $\overline{AC}$  is  $\boxed{3.585}$ .

**Hint:** You may move point  $D$ . A height is the length of an altitude, which must be perpendicular to the line containing the chosen base.

**Problem 3** Geogebra link: <https://tube.geogebra.org/m/cta9hbuf>

In  $\triangle ABC$  above, the height to base  $\overline{AC}$  is  $\boxed{3.511}$ .

**Hint:** You may move point  $D$ . A height is the length of an altitude, which must be perpendicular to the line containing the chosen base.