Polygon Measurement

Short-answer questions about length, angle, and area.

Measuring Carefully

Adjust the figures to find the requested measurements.

Geogebra link: https://tube.geogebra.org/m/gjf28er6

Problem 1 *In figure above, when point C is adjusted so that BC is perpendicular to AC, $AC =$* 2.1 .

Geogebra link: https://tube.geogebra.org/m/a888zyw2

Problem 2 *In $\triangle ABC$ above, the height to base $\overline{AC}$ is* 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.*

Geogebra link: https://tube.geogebra.org/m/kta9hbuf

Problem 3 *In $\triangle ABC$ above, the height to base $\overline{AC}$ is* 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.*

Geogebra link: https://tube.geogebra.org/m/q32gyaud

Problem 4 *In $\triangle ABC$ above, move point D to make the following measurments:*

(a) *When $\overline{BD}$ is a median, $AD =$* 2.25 .

Author(s): Brad Findell

(b) *When* $\overline{BD}$ *is a angle bisector,* $AD =$ $\boxed{2.77}$.

(c) *When* $\overline{BD}$ *is a median,* $AD =$ $\boxed{6.45}$.