

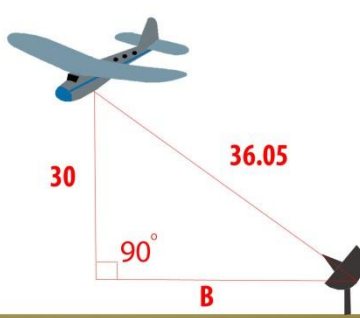
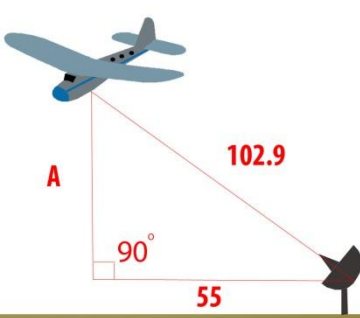
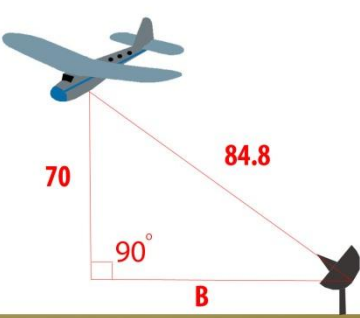
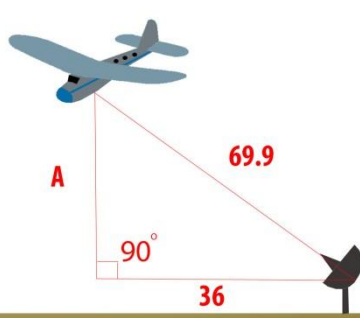
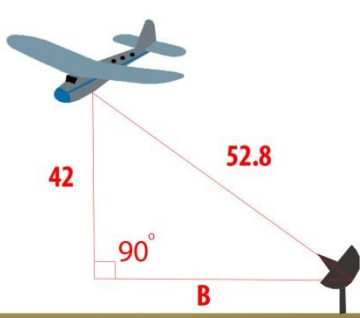
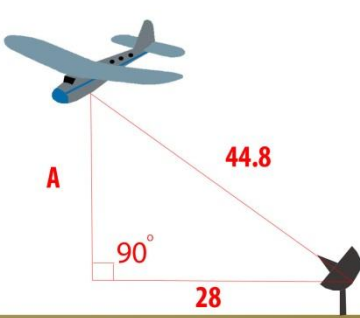
Catching the Perfect SAR Waves: Radar System Evaluation

ANSWER KEY

Instructions: Using your “Radar” System find the missing distance. Verify the distance using the Pythagorean Theorem. Provide both answers then calculate the percent error.

Formulas: *Pythagorean Theorem: $a^2 + b^2 = c^2$*

$$\text{Percent Error} = \left(\frac{\text{Theoretical Value} - \text{Experimental Value}}{\text{Theoretical Value}} \right) \times 100$$

<p>1.</p>  <p>Theoretical B = 20 cm</p>	<p>2.</p>  <p>Theoretical B = 87 cm</p>	<p>3.</p>  <p>Theoretical B = 48 cm</p>
<p>4.</p>  <p>Theoretical B = 60 cm</p>	<p>5.</p>  <p>Theoretical B = 32 cm</p>	<p>6.</p>  <p>Theoretical B = 35 cm</p>

Note: Experimental Values will vary slightly based on sensor calibration.