


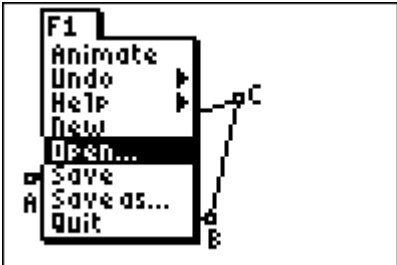
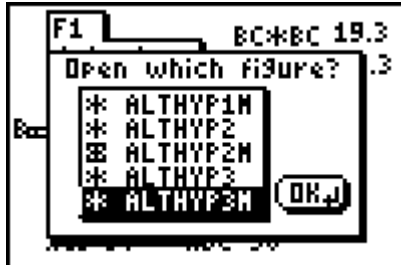
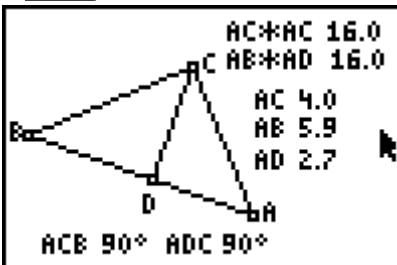


<p>After turning on your handheld press</p> <p>APPS</p> 	<p>Select CabriJr.</p> <p>5</p> 
<p>Y=  scroll down to Open</p> 	<p>ENTER scroll to ALTHYP3M</p> 
<p>ENTER</p> 	<p>Now grab and drag vertices A and C. Take note of what is changing and what is remaining the same.</p> <p>Answer the questions that follow.</p>

- 1) As you selected, grabbed and moved points A and C
 - A) What changed? _____
 - B) What remained the same? _____
- 2) What kind of triangle is $\triangle ABC$? _____
- 3) Name the hypotenuse of $\triangle ABC$. _____

- 4) \overline{CD} must be a(an) _____
- A) median
 - B) angle bisector
 - C) altitude
 - D) perpendicular bisector
- 5) Name the segments of the hypotenuse. _____ f
- 6) Name the legs of $\triangle ABC$. _____
- 7) Which segment of the hypotenuse is adjacent to leg AC? _____
- 8) Which of the following statements seems to be true? _____
- A) $AC \cdot AC > AB \cdot AD$
 - B) $AC \cdot AC = AB \cdot AD$
 - C) $AC \cdot AC < AB \cdot AD$
- 9) The answer to question 7 allows us to rewrite the expression as a proportion. Fill in the missing extremes: $\frac{?}{AC} = \frac{AC}{?}$ _____
- 10) The answer to question 7 allows us to rewrite the expression as a proportion. Fill in the missing means: $\frac{AB}{?} = \frac{?}{AD}$ _____
- 11) When the means of a proportion are the same that value is called the **mean proportional**. Example: $\frac{a}{x} = \frac{x}{b}$ In this proportion x is the **mean proportional** between a and b . Using this example as a guide and your answers to questions 6 and 7 fill in the blanks of the following statement:
- AC is the _____ between _____ and _____
- 12) Using your answers to questions 3 through 6 generalize the answer to question 8.
- If the altitude is drawn upon the hypotenuse of a right triangle then the _____ is the mean proportional between the _____.