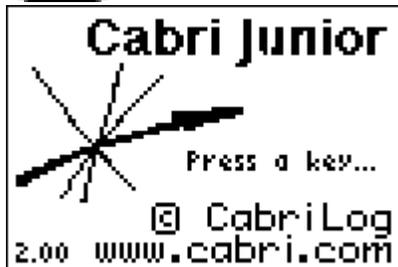
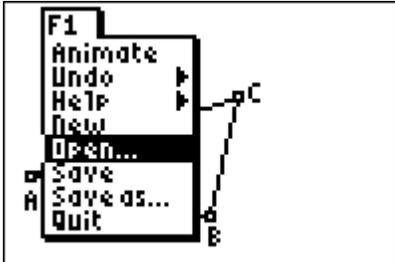
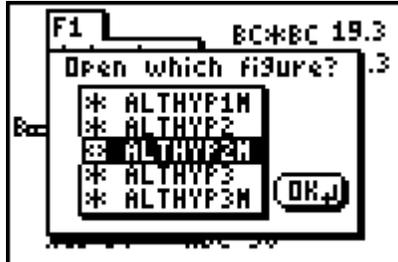
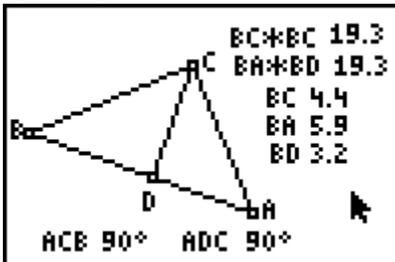


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|--|---|
| <p>After turning on your handheld press</p> <p>APPS</p>  | <p>Select CabriJr.</p> <p>5</p>  |
| <p>Y=  scroll down to Open</p>  | <p>ENTER scroll to ALTHYP2M</p>  |
| <p>ENTER</p>  | <p>Now grab and drag vertices A and C. Take note of what 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) _____
- median
 - angle bisector
 - altitude
 - perpendicular bisector
- 5) Name the segments of the hypotenuse. _____
- 6) Name the legs of $\triangle ABC$. _____
- 7) Which segment of the hypotenuse is adjacent to leg BC? _____
- 8) Which of the following statements seems to be true? _____
- $BC \cdot BC > BA \cdot BD$
 - $BC \cdot BC = BA \cdot BD$
 - $BC \cdot BC < BA \cdot BD$
- 9) The answer to question 7 allows us to rewrite the expression as a proportion. Fill in the missing extremes: $\frac{?}{BC} = \frac{BC}{?}$ _____
- 10) The answer to question 7 allows us to rewrite the expression as a proportion. Fill in the missing means: $\frac{BD}{?} = \frac{?}{BA}$ _____
- 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:
- BC 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 _____.