

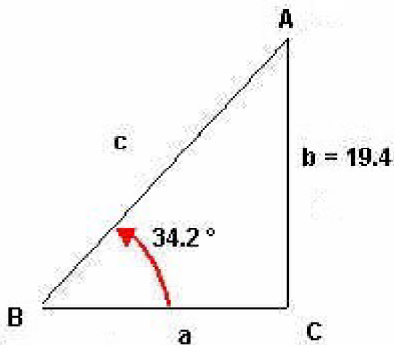


PROBLEMS AND SOLUTIONS - RIGHT TRIANGLE TRIGONOMETRY
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Please Send Questions and Comments to ingrid.stewart@csn.edu.
Thank you!

PLEASE NOTE THAT YOU CANNOT ALWAYS USE A CALCULATOR ON THE ACCUPLACER - COLLEGE-LEVEL MATHEMATICS TEST! YOU MUST BE ABLE TO DO SOME PROBLEMS WITHOUT A CALCULATOR!

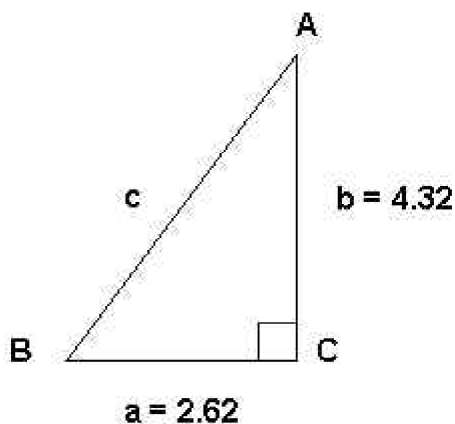
Problem 1:

Solve the right triangle pictured below. That is, find all unknown sides and angles. Round the final solutions to one decimal place! Solve for angle **A** first, then for side **a**, and finally for side **c**.



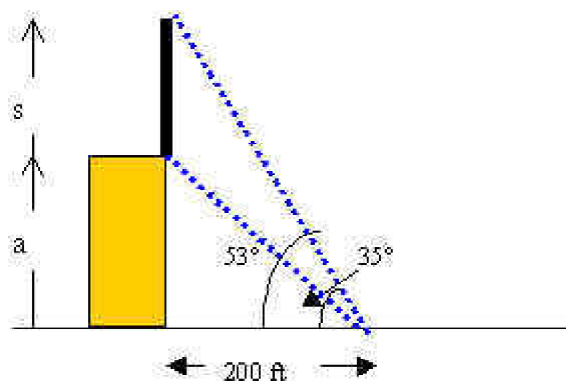
Problem 2:

Solve the right triangle pictured below. Round the final solutions to two decimal places. Solve for angle **A** first, then for Angle **B**, and finally for side **c**.



Problem 3:

At a point 200 feet from the base of a building, the angle of elevation to the bottom of an antenna is 35° , and the angle of elevation to the top is 53° , as shown in the picture. Find the height s of the antenna rounded to one decimal place.



SOLUTIONS

You can find detailed solutions below the link for this problem set!

1. $A = 55.8^\circ$, $a \approx 28.5$, and $c \approx 34.5$

2. $A \approx 31.24^\circ$, $B \approx 58.76^\circ$, and $c \approx 5.05 \text{ ft}$

3. 125.4 ft