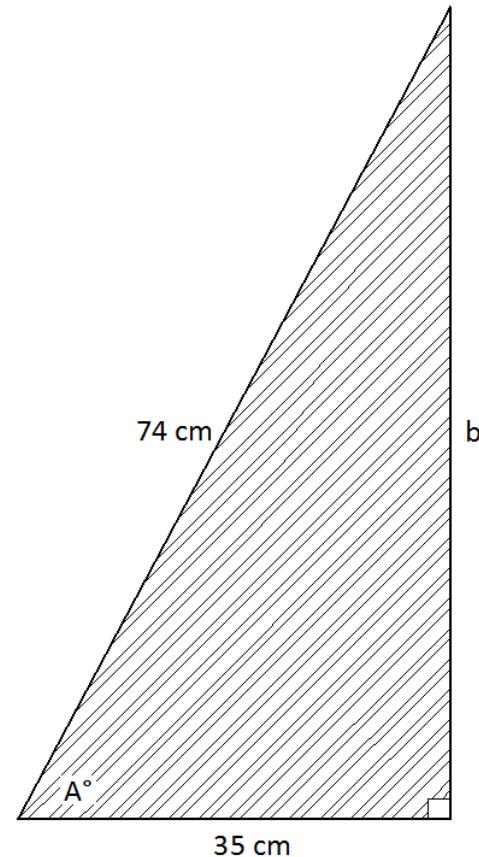


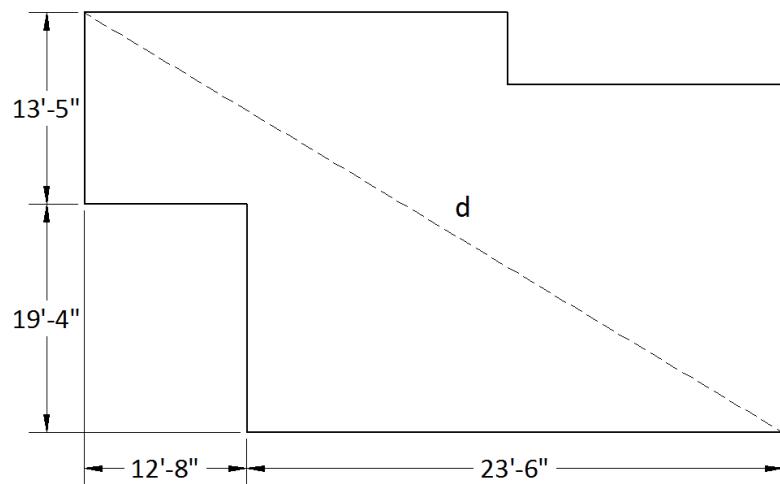
Math 63 Chapter 3 Review

- Calculators are allowed but show your steps and **box** your final answer.
- Include the correct unit with your answer.

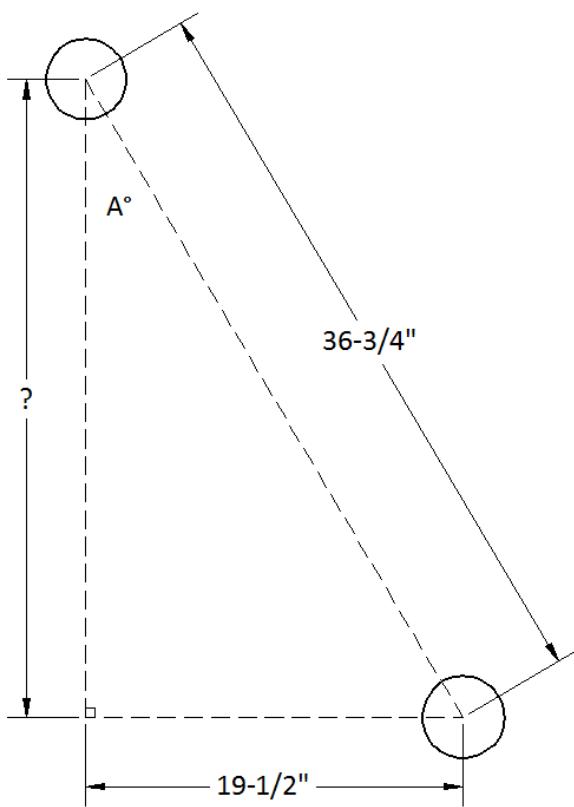
1. Use the Pythagorean Theorem to calculate the height (b) of the steel plate. Use trigonometry to calculate the angle A. Round both measures to one decimal place.



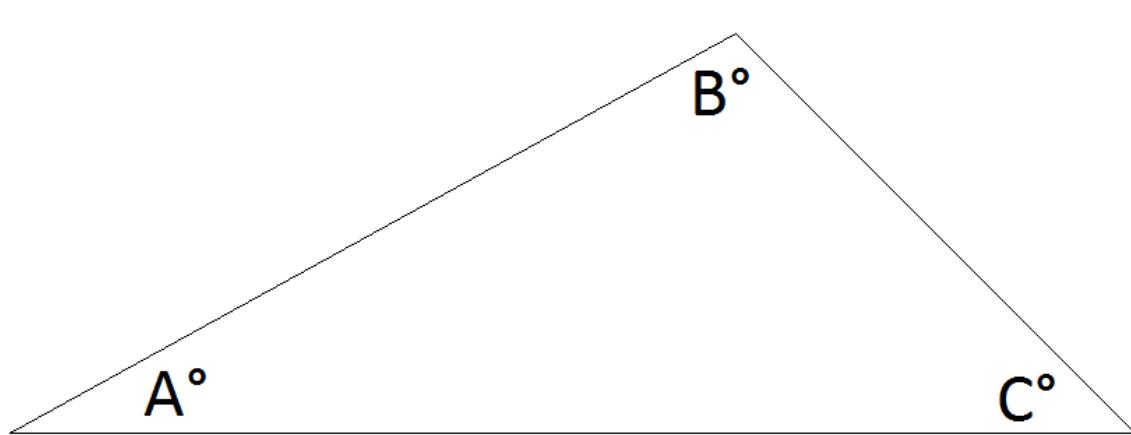
2. Calculate the diagonal distance d for the rectangular house rounded to the nearest 16th of an inch.



3. Two holes are to be drilled $36\frac{3}{4}$ inches apart. If they are spaced $19\frac{1}{2}$ inches apart horizontally, use the Pythagorean Theorem to find the distance between them vertically rounded to the nearest 16^{th} of an inch. Use trigonometry to find angle A rounded to one decimal place.



4. Measure angles A, B & C in the triangle rounded to the nearest degree.

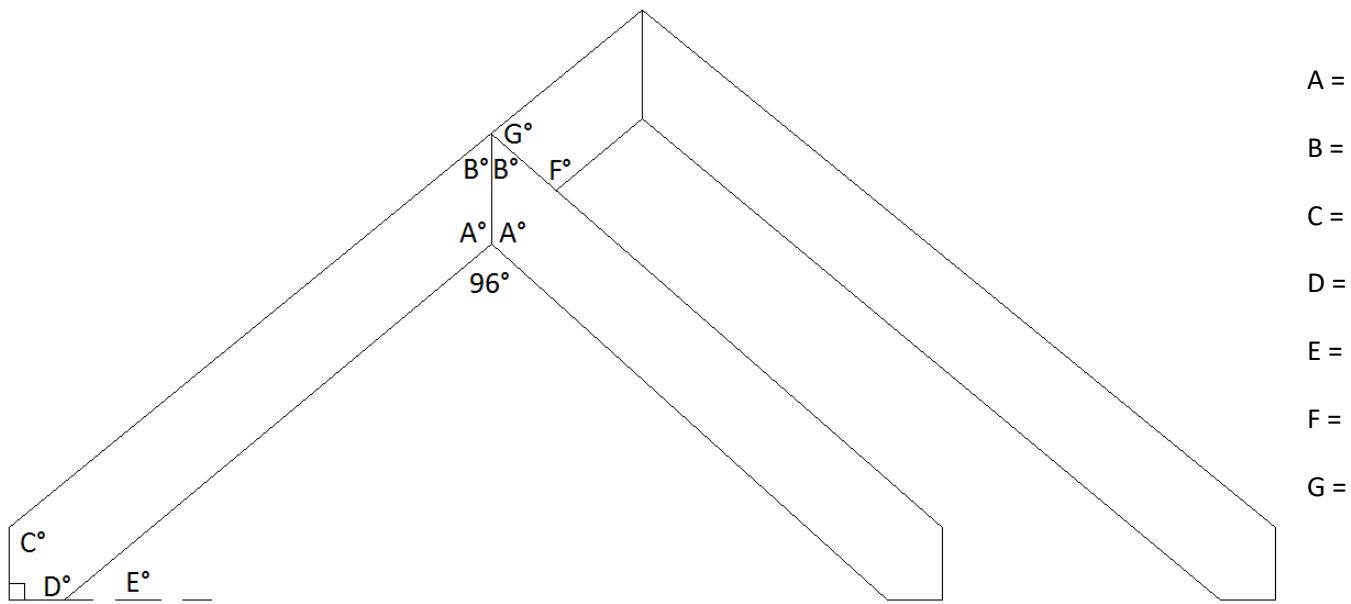


A =

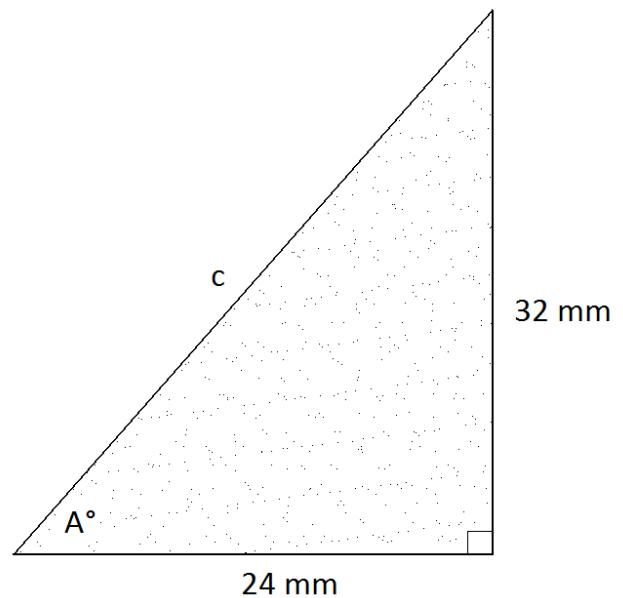
B =

C =

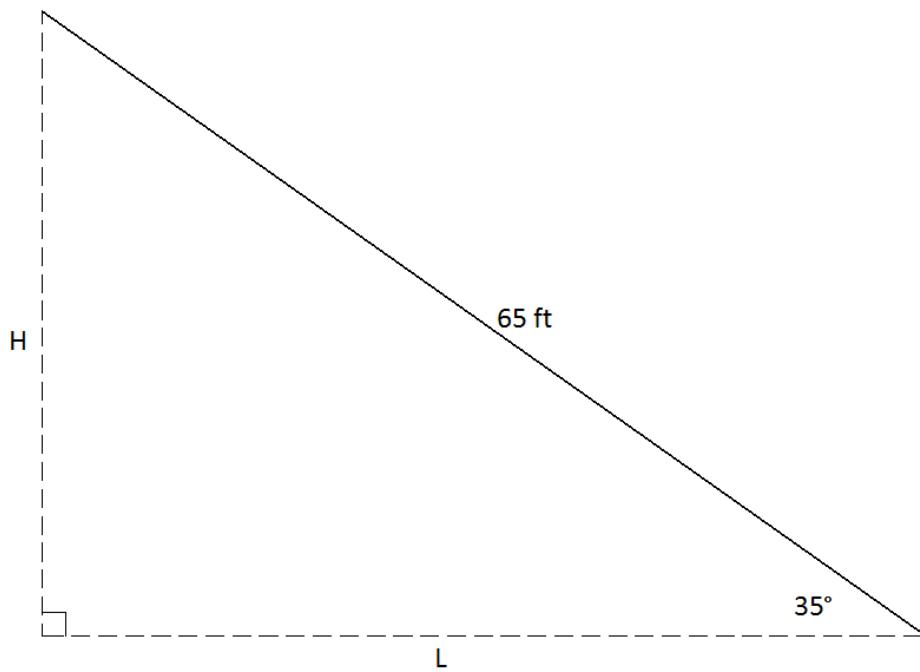
5. Calculate the angles in roof (lines that appear parallel are parallel).



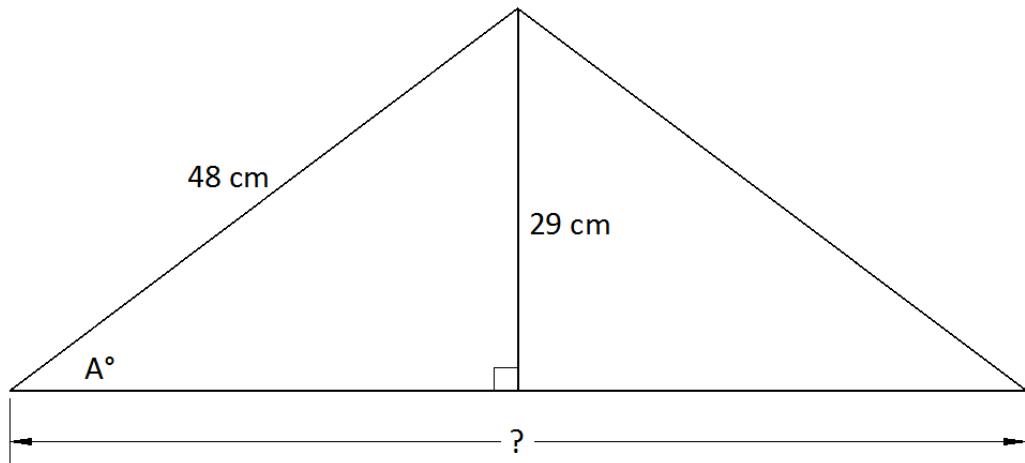
6. Use trigonometry to calculate angle A and length c in the plate steel brace rounded to one decimal place.



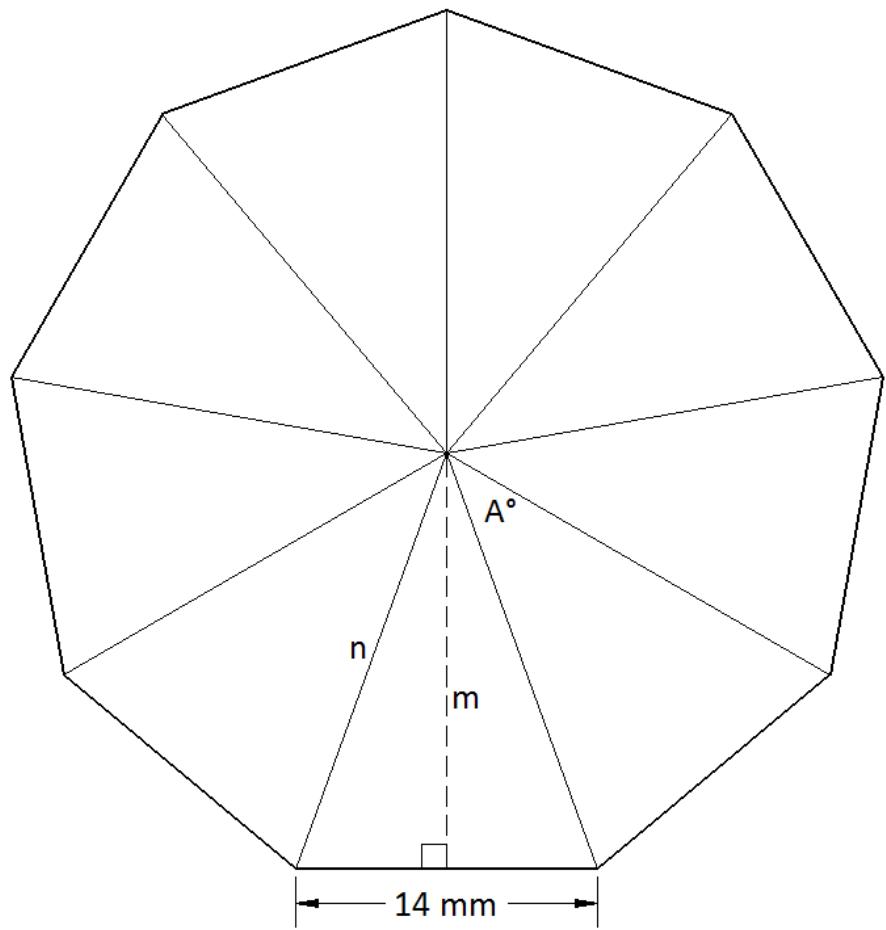
7. A 65 foot crane is raised to an angle of 35° . Find the length (L) and height (H) for the reach of the crane, rounded to one decimal place. You don't need to convert to inches.



8. Calculate angle A and the width in the welded truss roof rounded to one decimal place.



9. In a regular nonagon the 9 angles at the center are all equal. Calculate angle A then use trigonometry to find lengths m & n rounded to one decimal place.



10. There are 10 holes equally spaced 52 millimeters from the center on the disc brake. Use trigonometry to calculate the (x,y) coordinates for holes A & B. Round your answers to one decimal place.

