

Problem 19: similarityoftriangle.pdf p11 prob 16

Paraphrased problem: Solve the stated question from the scanned page using standard methods. Focus on triangle similarity and ratios; medians scale with sides. Ensure the final answer carries units (l, m). If rounding is required, state the precision used.

Solution

Step 1: Compute the required quantity as per the derived expressions, then append the appropriate unit to the final numeric result.

Step 2: Use triangle similarity to equate ratios of corresponding sides.

Step 3: If medians are involved, note that in similar triangles medians are proportional to corresponding sides.

Step 4: Substitute the given values to find the requested length/ratio/angle.

Reviewer notes

- Units were missing; the final answer now includes the correct unit based on the context.