

L071 · GCSE Mathematics 1MA1 · 60 minutes

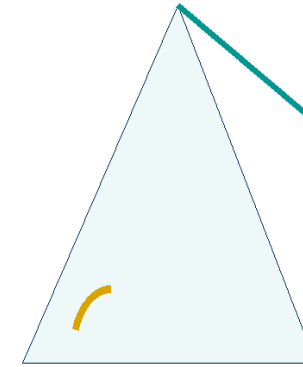
The goal

Combine triangle methods, scale drawings and bearings appropriately.

Connect & Check

Complete the starter in your workbook. Retrieve the prior skill, then identify one likely error before you use today's method.

L071 Triangle problems and bearings



known length

diagram first
then method

target / check

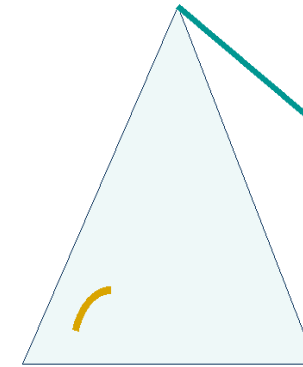
Objective: Combine triangle methods, scale drawings and bearings appropriately.

Compare your method with a partner. Agree on one reliable step and one check.
Be ready to explain your reasoning, not just your answer.

Build the method

Use the worked model to foundation: right triangles and bearings. Higher: sine rule, cosine rule and non-right-triangle area. Record the key step and one check that proves the answer.

L071 Triangle problems and bearings



known length

diagram first
then method

target / check

Objective: Combine triangle methods, scale drawings and bearings appropriately.

Choose your route

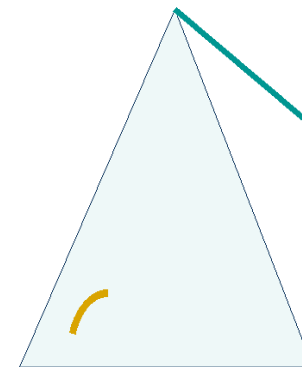
Choose your route: A - visual model, B - method first, or C - explain first.
Whichever route you choose, your final answer must prove the lesson objective.

Guided practice

A traveller goes north 12 km and east 5 km. Find distance and bearing from start to nearest degree.

Apply

L071 Triangle problems and bearings



known length

diagram first
then method

target / check

Objective: Combine triangle methods, scale drawings and bearings appropriately.

7/11

Independent practice

A bearing from A to B is 315° .
State reverse bearing and
explain the 180° change.

Apply

L071 Triangle problems and bearings

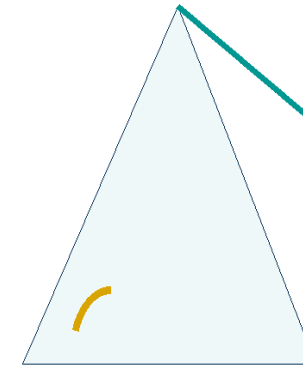


diagram first
then method

known length

target / check

Objective: Combine triangle methods, scale drawings and bearings appropriately.

8/11

Exam-style practice

Use a labelled diagram to calculate the missing value. State the theorem or formula and include units where needed.

Recall & Review

Complete a fresh question without notes. Check your answer, correct one error if needed, and record the next practice step.

Before next lesson

Correct one error, record one target and complete the flipped learning task.

L071 Recall & Review

Triangle problems and bearings

Fresh evidence: prove the objective

Solve a new question without prompts. Explain one check, then correct one error in your working.

Objective: Combine triangle methods, scale drawings and bearings appropriately.

Write the next practice step before you leave. It must test the method again, not simply copy today's example.

Feedback language

Use the full phrases before the abbreviations.

What Went Well (WWW)

I selected the correct geometric fact, theorem, formula or transformation and used a clear diagram with appropriate labels and units.

Identify the mathematical method, representation, reasoning or check that improved.

Even Better If (EBI)

I will name the fact or theorem, show the substitution or construction step and check whether the size, direction and units of the result are reasonable.

Set one precise next-step action and test it on a fresh question.

Extension route

Choose this route only after the core evidence is secure.

Stretch

A traveller goes north 12 km and east 5 km. Find distance and bearing from start to nearest degree.

Deep challenge

A bearing from A to B is 315° . State reverse bearing and explain the 180° change.

Explain your reasoning clearly enough that another learner could check it.