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National 5 Maths
Sine Rule: Finding an Angle

SQA past paper and specimen paper questions and answers by topic

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National 5 Maths
SQA 2016 Paper 2
Question 8

National 5 Maths
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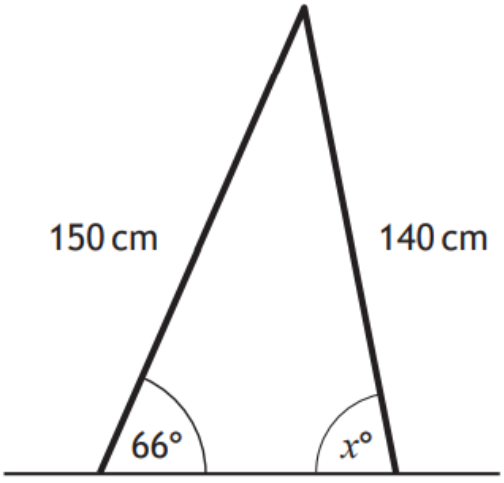
A set of stepladders has legs 150 centimetres and 140 centimetres long.

When the stepladder is fully open, the angle between the longer leg and the ground is 66°.



Calculate $x°$, the size of the angle between the shorter leg and the ground. **3**

Answer:

78.2°

National 5 Maths
SQA 2017 Specimen
Paper 2 Question 15

National 5 Maths
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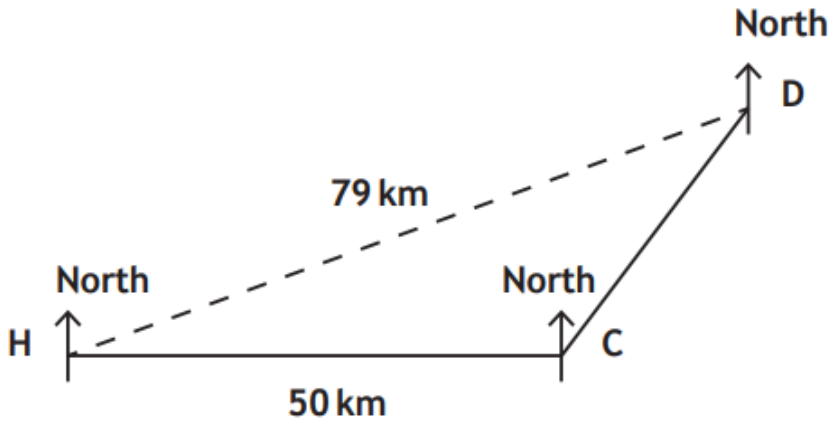
A yacht sails from a harbour H to a point C, then to a point D as shown below.



C is 50 kilometres due east of H.

D is on a bearing of 040° from C and is 79 kilometres from H.

(a) Calculate the size of angle CDH. **4**

(b) Hence, calculate the bearing on which the yacht must sail to return directly to the harbour. **2**

Answers:

(a) 29°

(b) 249°

National 5 Maths
SQA 2021 Paper 2
Question 4

National 5 Maths
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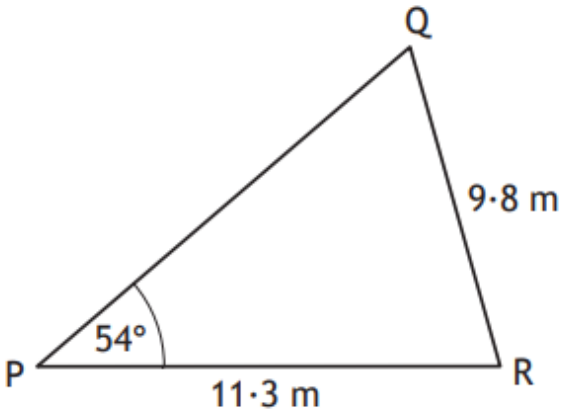
In triangle PQR

- PR = 11·3 metres
- QR = 9·8 metres
- angle QPR = 54°.



Calculate the size of acute angle PQR. 3

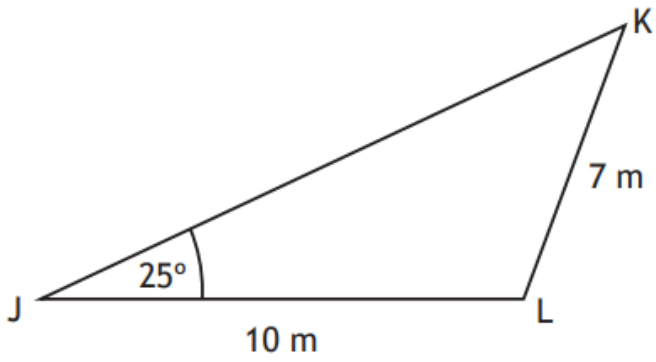
Answer:

68.9°

National 5 Maths
SQA 2023 Paper 2
Question 4

The diagram shows triangle JKL.

- Angle KJL = 25°
- JL = 10 metres
- KL = 7 metres



Calculate the size of angle JKL. **3**

Answer:

37.1°

National 5 Maths
SQA 2025 Paper 2
Question 12

National 5 Maths
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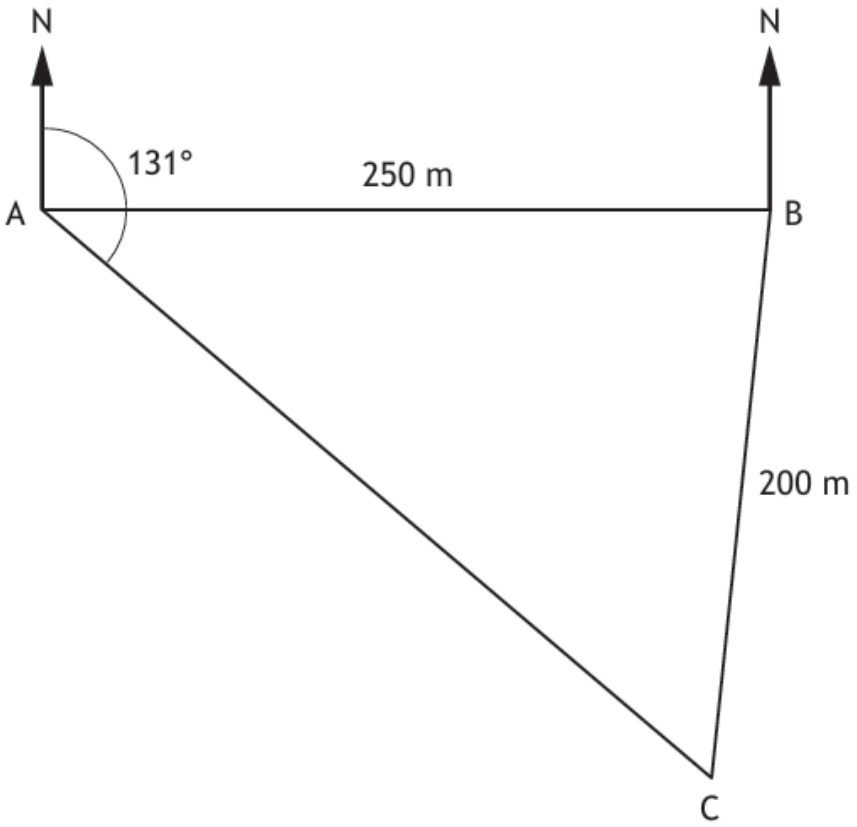
In the diagram A, B and C represent the positions of three checkpoints in an orienteering course.



- B is 250 metres **east** of A.
- The bearing of C from A is 131°.
- C is 200 metres from B.

Calculate the bearing of C from B.

Do not use a scale drawing. 4

Answer:

186°