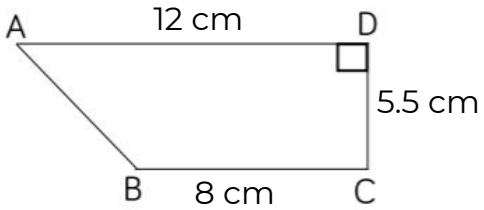
Solve problems mixing angles and sides

Maths

Mrs Dennett

Solve problems mixing angles and sides

1. ABCD is a trapezium.



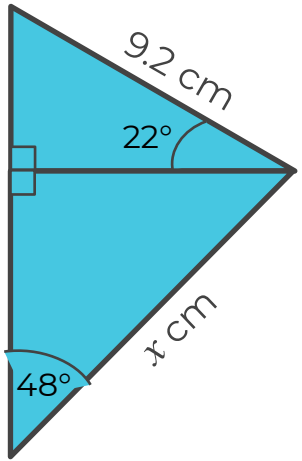
a) Work out the size of angle ABC.

b) Work out the size of angle BAD.

Give your answers to 1 d.p.

2. Find the length marked x.

Give your answer to 1 d.p.



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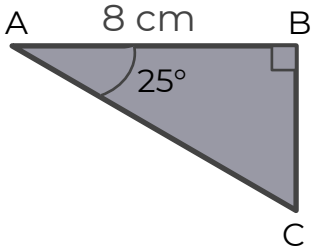
3. ABC is a right-angled triangle.



a) Work out the length BC.

b) Work out the length AC.

c) Work out the perimeter of ABC.

Give all answers to one decimal place.

4. A ladder that is 10 metres long is placed against a wall.
The angle of elevation is 70°.

a) How high up the wall does the ladder reach?

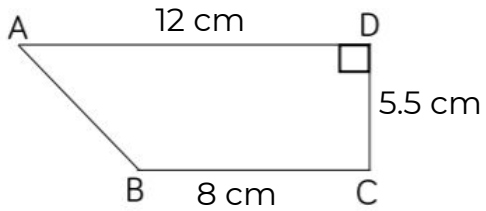
b) How far from the wall is the base of the ladder?

Give your answers to 1 d.p.

Answers

Solve problems mixing angles and sides

1. ABCD is a trapezium.



a) Work out the size of angle ABC.

126.0°

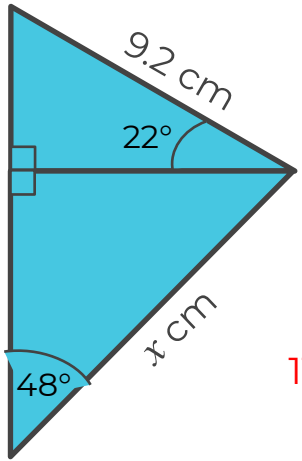
b) Work out the size of angle BAD.

54.0°

Give your answers to 1 d.p.

2. Find the length marked x.

Give your answer to 1 d.p.



11.5 cm

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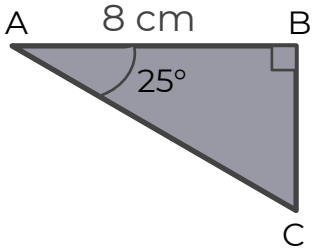
3. ABC is a right-angled triangle.



a) Work out the length BC.

3.7 cm

b) Work out the length AC.

8.8 cm

c) Work out the perimeter of ABC.

20.6 cm

Give all answers to one decimal place.

4. A ladder that is 10 metres long is placed against a wall.

The angle of elevation is 70°.

a) How high up the wall does the ladder reach? 9.4 m

b) How far from the wall is the base of the ladder? 3.4 m

Give your answers to 1 d.p.