

SQA Past paper questions

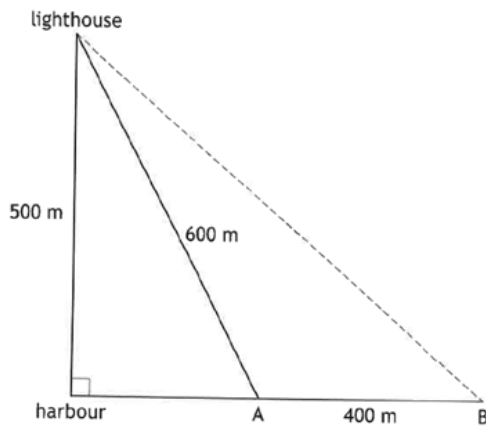
2024 - Paper 2 - Question 6

A boat sails due East from a harbour.

A lighthouse is 500 metres due North of the harbour.

When the boat is at position A it is 600 metres away from the lighthouse.

It sails a further 400 metres to position B.



Calculate the **direct** distance from position B to the lighthouse as shown by the dotted line.

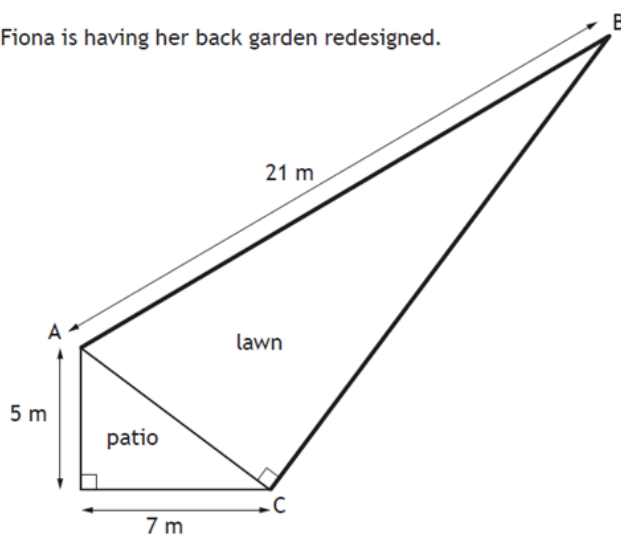
4

Do not use a scale drawing.

Click [here](#) for video solution. 

2023 - Paper 2 - Question 3

Fiona is having her back garden redesigned.



A new fence is to be put from A to B and from B to C.

Rolls of fencing are 3 m long and cost £22 per roll.

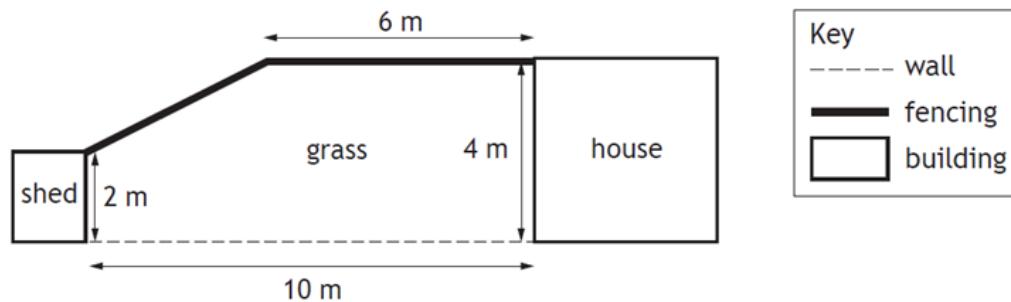
Calculate the cost of the fencing.

6

Click [here](#) for video solution. 

2021 - Paper 2 - Question 2

A property developer has the garden plans for a new housing project.



The fencing is at a right angle to the house.

The wall is at a right angle to the house and the shed.

Fencing panels are sold in 2 m sections costing £21.40 each.

(a) Calculate the minimum cost of buying fencing. 5

(b) Calculate the area of the grass. 2

Click [here](#) for video solution. 

2019 - Paper 2 - Question 8

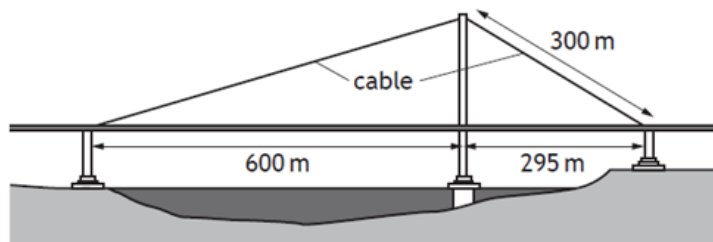
A new road bridge has been built. A worker paints 367 lines along the centre of the road.

- Each line is four metres long
- There is a gap of two metres between each line
- The first line starts at the beginning of the bridge
- The last line finishes at the end of the bridge

(a) Calculate the length of the bridge. 2

Two cables support a section of the bridge.

This section forms two right-angled triangles, as shown in the diagram.



(b) Calculate the total length of cable needed for this section of bridge.

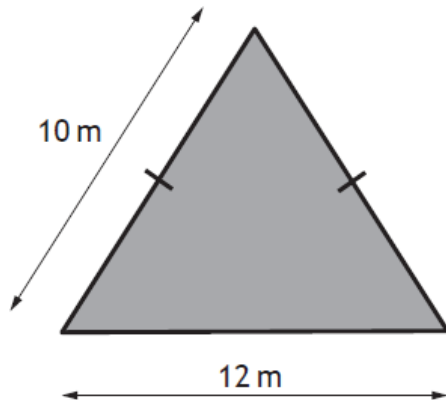
Do not use a scale drawing.

4

Click [here](#) for video solution. 

2018 - Paper 1 - Question 13

A lawn is to be created in the shape of an isosceles triangle with dimensions as shown below.



Calculate the area of the lawn. 3

Click [here](#) for video solution. 

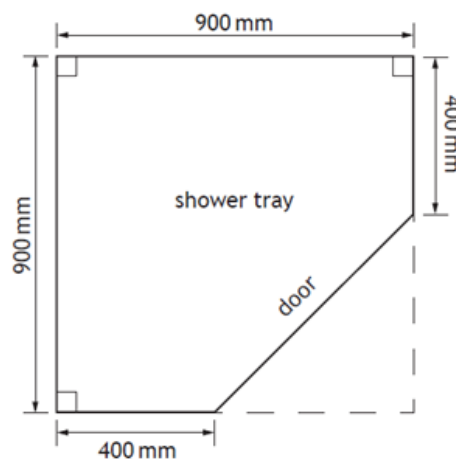
2017 - Paper 2 - Question 8

Zuzanna is remodelling her shower room.

She considers two designs.

The first design has a pentagonal shower tray.

The door will be fitted on the side of the tray as shown.



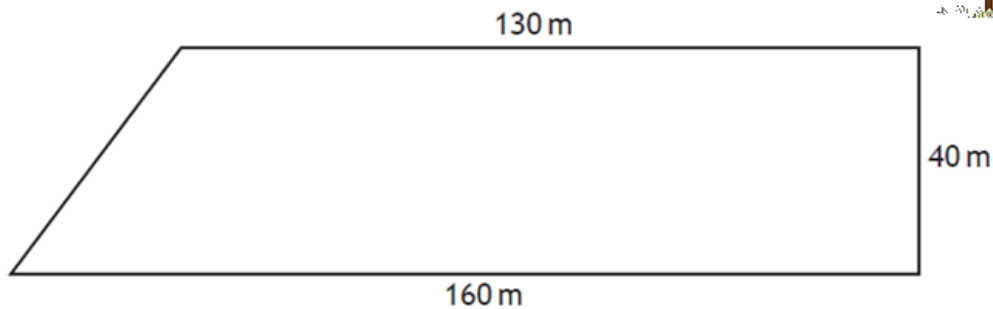
(a) Calculate the length of the side where the door will go. 3

(b) Calculate the area of the pentagonal shower tray. 2

Click [here](#) for video solution. 

2016 - Paper 1 - Question 6

A farmer needs to completely enclose this field with a new fence.



The fence is only sold in 80 metre rolls.

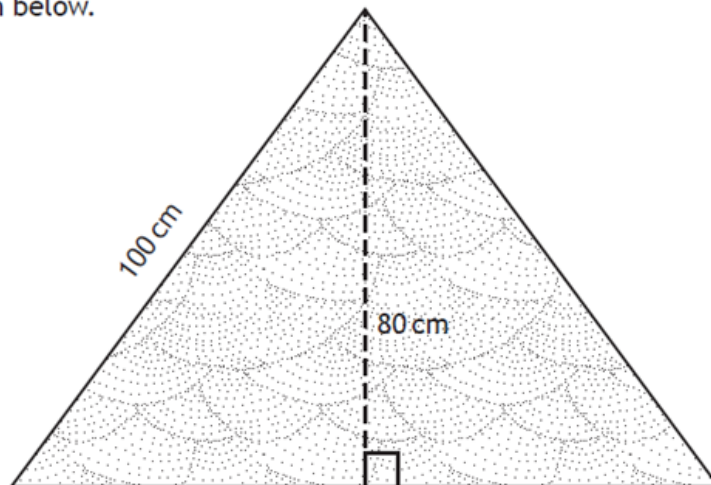
Each roll costs £73.99.

Calculate the cost of the new fence. 5

Click [here](#) for video solution. 

2015 - Paper 1 - Question 7

Lucy has a scarf in the shape of an isosceles triangle with dimensions as shown below.



Lucy wants to sew ribbon along all three edges of the scarf.

She has 3.5 metres of ribbon.

Does Lucy have enough ribbon for the scarf?

Show all working and justify your answer. 4

Click [here](#) for video solution. 