PYTHAGORAS

Pearson Edexcel – Specimen 2 - Paper 1 (Non-Calculator) Foundation Tier

1.

22 Triangle ABC has perimeter 20 cm.

$AB = 7$ cm.
$BC = 4$ cm.

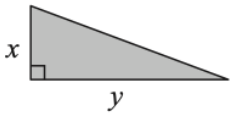
By calculation, deduce whether triangle ABC is a right-angled triangle.

(Total for Question 22 is 4 marks)

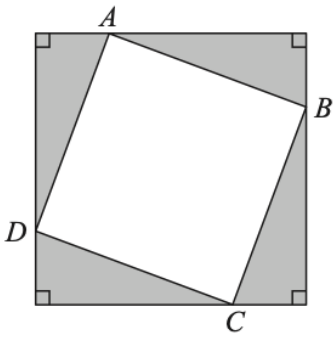
Pearson Edexcel – Specimen 2 - Paper 3 (Calculator) Foundation Tier

2.

28 Here is a right-angled triangle.



Four of these triangles are joined to enclose the square *ABCD* as shown below.



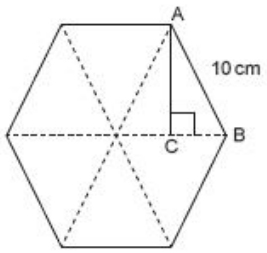
Show that the area of the square *ABCD* is $x^2 + y^2$

(Total for Question 28 is 3 marks)

OCR Tuesday 11 June 2019 – Morning (Calculator) Foundation Tier

3.

23 The diagram shows a regular hexagon made from six equilateral triangles.
Each side is 10 cm.
The angle ACB is a right angle.



Not to scale

(a) Show that AC = 8.66 cm, correct to 3 significant figures. **[4]**

(b) (i) Show that the area of triangle ACB is 21.7 cm^2, correct to 3 significant figures. **[2]**

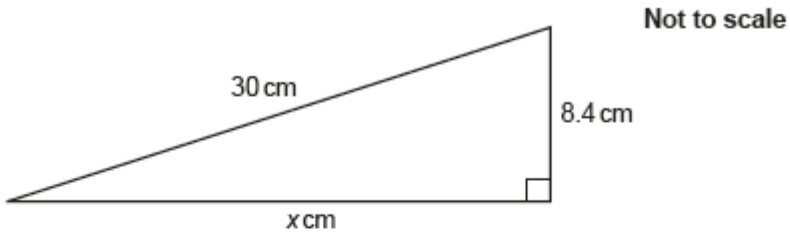
(ii) Find the area of the hexagon, giving your answer to an appropriate degree of accuracy.

(ii) ..... cm^2 **[2]**

OCR Tuesday 6 November 2018 – Morning (Calculator) Foundation Tier

4.

20 Here is a right-angled triangle.



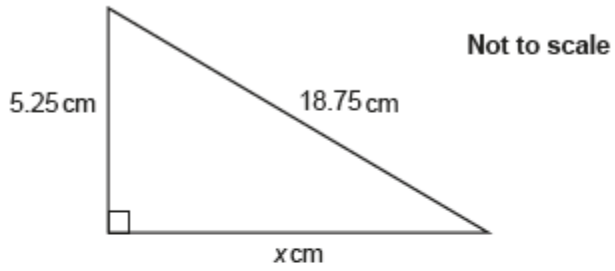
Work out the value of x.

$x =$ ..... **[3]**

OCR Tuesday 12 June 2018– Morning (Calculator) Foundation Tier

5.

16 Here is a right-angled triangle.



Work out the value of x.

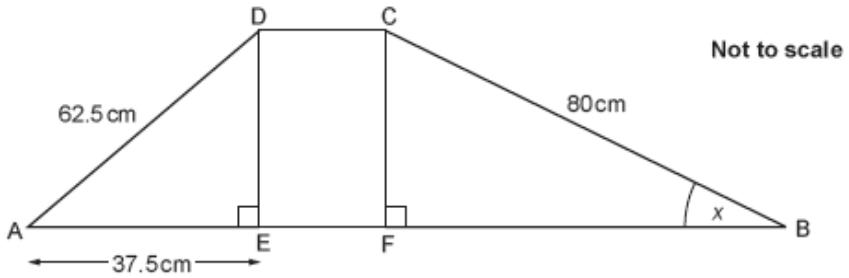
$x =$ ..... **[3]**

OCR Thursday 2 November 2017– Morning (Calculator) Foundation Tier

6.

19 In the diagram below, ABCD is a trapezium.
Length AE is 37.5cm.
DE = CF

Find the value of angle *x*.

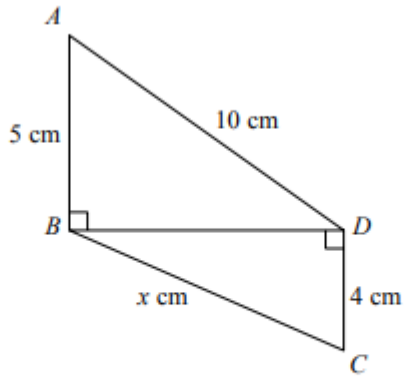


x = ... ° **[6]**

Pearson Edexcel –Sample Papers - Paper 2 (Calculator) Foundation Tier

7.

28 Triangles *ABD* and *BCD* are right-angled triangles.



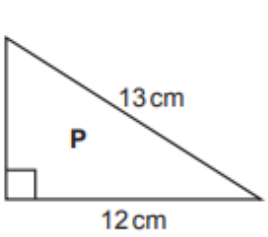
Work out the value of x.
Give your answer correct to 2 decimal places.

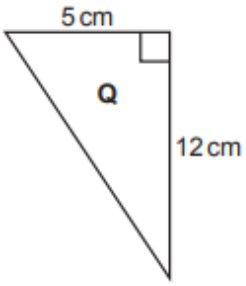
(Total for Question 28 is 4 marks)

OCR Thursday 8 June 2017 – Morning (Non - Calculator) Foundation Tier

8.

21 Triangles **P** and **Q** are right-angled.





Not to scale

(a) Show that the two shorter sides in triangle **P** have the same lengths as the two shorter sides in triangle **Q**. **[3]**

(b) Explain why the two triangles are congruent.

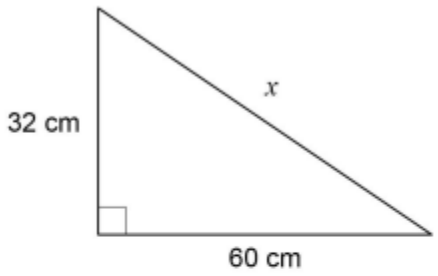
.....

..... **[1]**

AQA Monday 8 June 2020 – Morning (Calculator) Foundation Tier

9.

24 Use Pythagoras' theorem to work out the value of x.



Not drawn accurately

[3 marks]

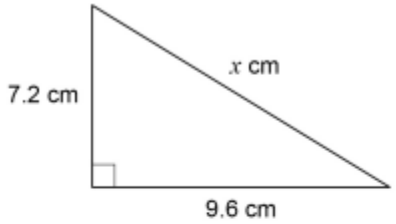
Answer _____ cm

AQA Thursday 8 November 2018 – Morning (Calculator) Foundation Tier

10.

19 Here is a right-angled triangle.

Not drawn accurately



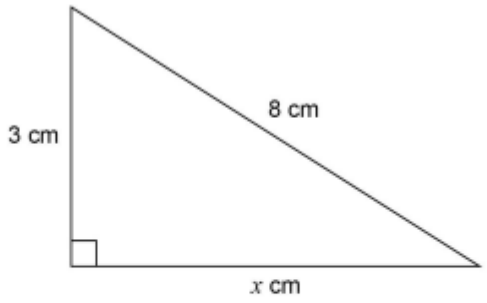
Show that $x = 12$

[2 marks]

AQA Thursday 8 June 2017– Morning (Calculator) Foundation Tier

11.

22



Not drawn accurately

Work out the value of x as a decimal.

[3 marks]

Answer _____