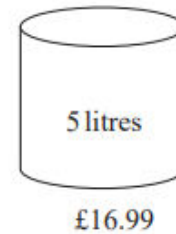
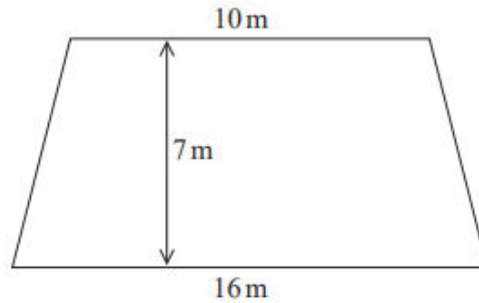


AREA OF COMPOUND SHAPES

Pearson Edexcel - Thursday 8 November 2018 - Paper 2 (Calculator) Foundation Tier

1.

24 The diagram shows a floor in the shape of a trapezium.



John is going to paint the floor.

Each 5 litre tin of paint costs £16.99
1 litre of paint covers an area of 2 m^2

John has £160 to spend on paint.

Has John got enough money to buy all the paint he needs?
You must show how you get your answer.

(Total for Question 24 is 5 marks)

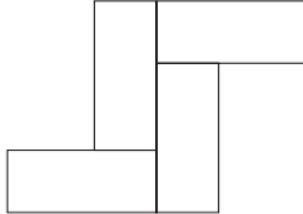
2.

24 Here is a rectangle.



The length of the rectangle is 7 cm longer than the width of the rectangle.

4 of these rectangles are used to make this 8-sided shape.



The perimeter of the 8-sided shape is 70 cm.

Work out the area of the 8-sided shape.

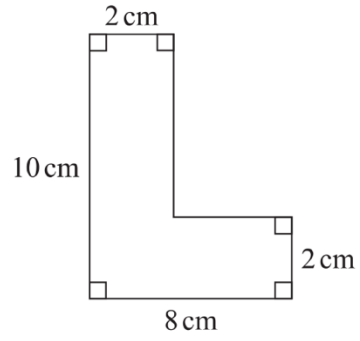
..... cm²

(Total for Question 24 is 5 marks)

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

3.

16



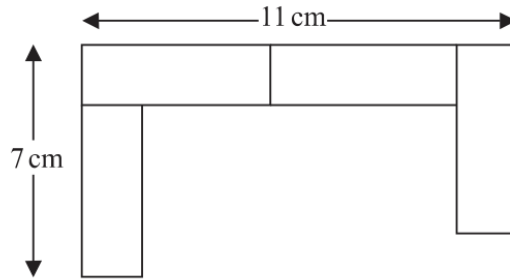
Work out the area of the shape.

..... cm²

(Total for Question 16 is 2 marks)

4.

23 A pattern is made using identical rectangular tiles.



Find the total area of the pattern.

..... cm²

(Total for Question 23 is 4 marks)

OCR – Tuesday 03 November 2020- Morning - Paper 1 (Calculator) Foundation Tier

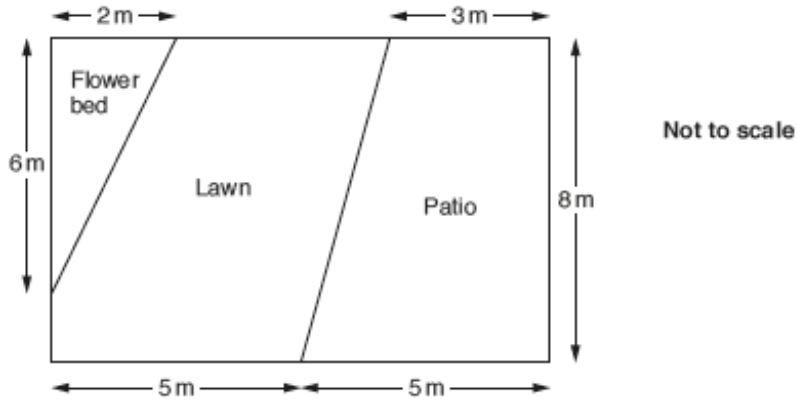
5.

25		142.2[0] with correct working	<p>6</p> <p>M1 for 36^2 or 1296</p> <p>M1 for $k \times \pi \times 18^2$ or where $k = \frac{1}{2}, 1, 1\frac{1}{2}$ or 3</p> <p>AND</p> <p>M1 for <i>their</i> area $\times 30$</p> <p>M1 for <i>their</i> mass $\div 1000$ and $\div 10$ or counting up in 10 000s to their mass</p> <p>AND</p> <p>M1 for <i>their</i> 9×15.8</p> <p>If 0, 1 or 2 scored instead award SC3 for answer of 142.2[0] with insufficient working</p> <p>If 0 or 1 scored instead award SC2 for 2822 to 2823.02</p> <p>If 0 scored award SC1 for 1526 to 1527.02, 1017 to 1018.008, 508 to 509.004, 3051 to 3054.024, 162π, 324π, 486π rot to at least nearest integer</p>	<p>Correct working requires M1 AND M1 AND M1</p> <p>M2 implied by 2822 to 2823.02 or M1 implied by 1526 to 1527.02, 1017 to 1018.008, 508 to 509.004, 3051 to 3054.024, 162π, 324π, 486π rot to at least nearest integer</p> <p><i>their</i> area cannot be 36 and M1 implied by 84660 to 84 690.6 or 84.66 to 84.7</p> <p><i>their</i> mass is attempt at (rectangle and circle(s)) $\times 30$, M1 implied by 8.46 to 8.47</p> <p><i>their</i> 9 dep. on fourth M1 scored with a rounding up to next integer</p>
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OCR Monday 6 November 2017– Morning (Calculator) Foundation Tier

6.

- 9 The diagram represents a rectangular garden of length 10m and width 8m. The flower bed is a triangle and the patio is a trapezium. The rest of the garden is lawn.

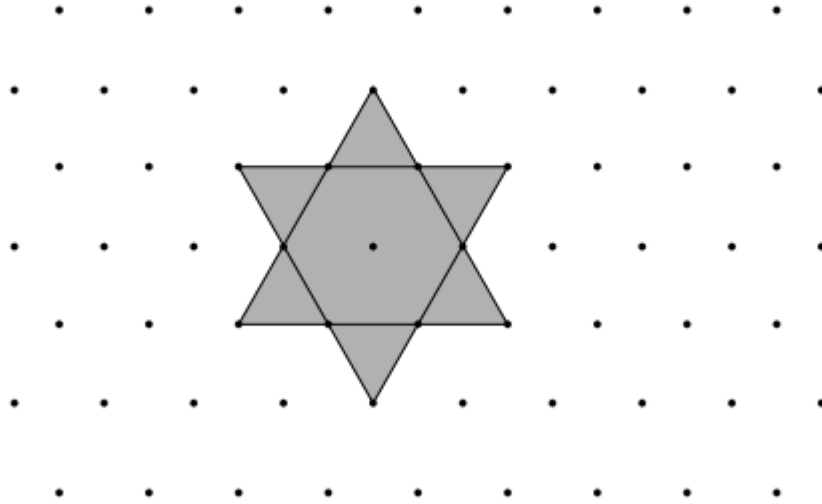


Work out the area of the lawn.

..... m² [6]

7.

12 Here is a star shape.



The star shape is made from a regular hexagon and six congruent equilateral triangles.

The area of the star shape is 96 cm^2 .

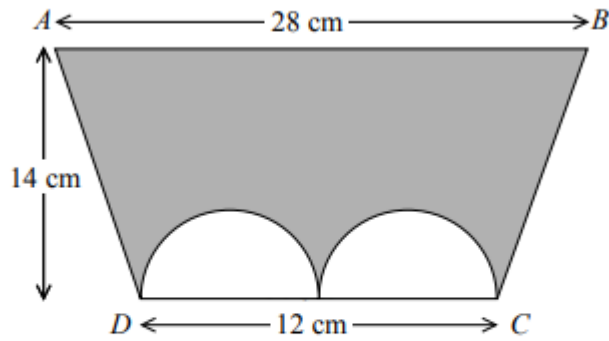
Work out the area of the regular hexagon.

..... cm^2

(Total for Question 12 is 2 marks)

8.

18 The diagram shows a trapezium $ABCD$ and two identical semicircles.



The centre of each semicircle is on DC .

Work out the area of the shaded region.

Give your answer correct to 3 significant figures.

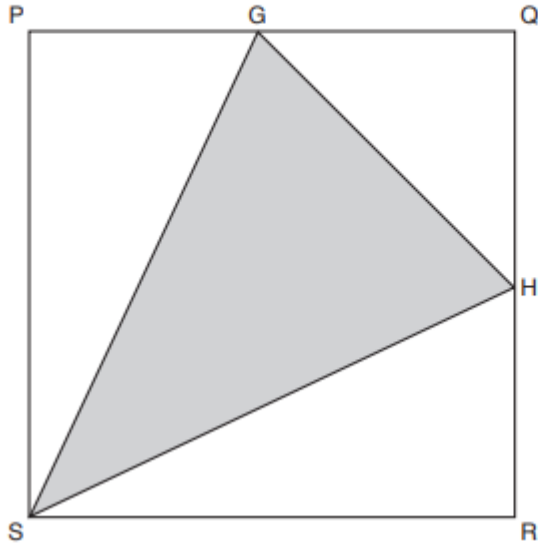
..... cm²

(Total for Question 18 is 4 marks)

OCR Wednesday 8 November 2017– Morning (Calculator) Foundation Tier

9.

- 17 PQRS is a square.
G is the midpoint of PQ and H is the midpoint of QR.
Triangle GHS is shaded.



Not to scale

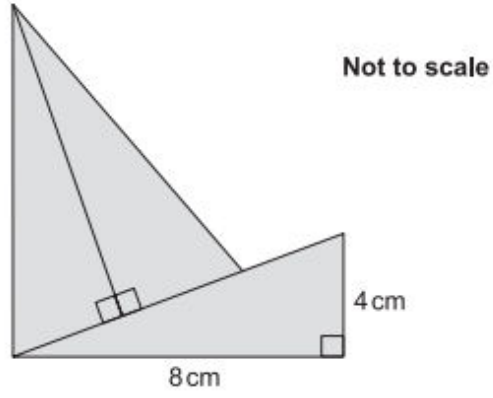
Find the ratio shaded area : area of square in its simplest form.
Show all your working.

..... : [4]

OCR Sample Question Paper 1 – Morning/Afternoon (Calculator) Foundation Tier

10.

- 5 This shape is made from three congruent right-angled triangles.



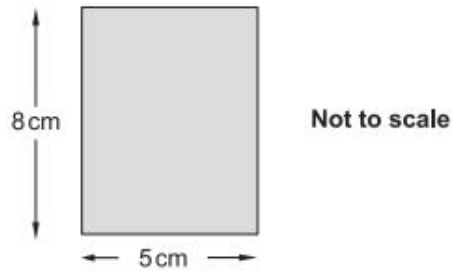
Find the total area of the shape.

..... cm² [3]

OCR Sample Question Paper 3 – Morning/Afternoon (Calculator) Foundation Tier

11.

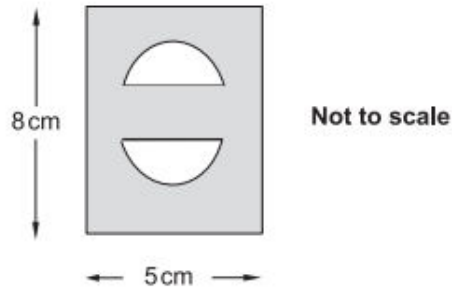
6 Jo makes a pendant from a rectangular piece of silver.



(a) Work out the area of this rectangle.

(a) cm² [1]

(b) To complete the pendant, Jo cuts two semicircles of radius 1 cm from the rectangle, as shown below.



Show that the shaded area is 36.9 cm² correct to three significant figures.

[4]

(c) The silver Jo uses is 2 mm thick.

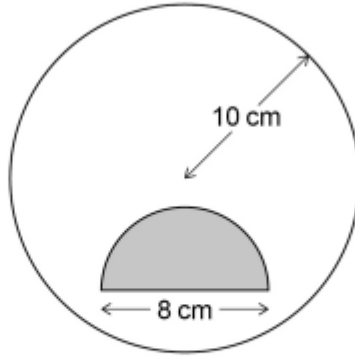
Find the volume of silver in the pendant.
Give your answer in cm^3 .

(c) cm^3 [3]

12.

25 A shaded semicircle is inside a circle as shown.

Not drawn accurately



The **radius** of the circle is 10 cm

The **diameter** of the semicircle is 8 cm

How many times bigger is the unshaded area than the shaded area?

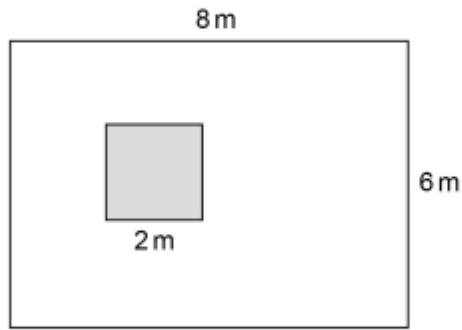
[4 marks]

Answer _____

AQA Thursday 24 May 2018 – Morning (Non-Calculator) Foundation Tier

13.

- 7 A rectangular carpet measures 8 m by 6 m
Part of the carpet is covered by a square rug of length 2 m



Not drawn accurately

Show that $\frac{1}{12}$ of the carpet is covered by the rug.

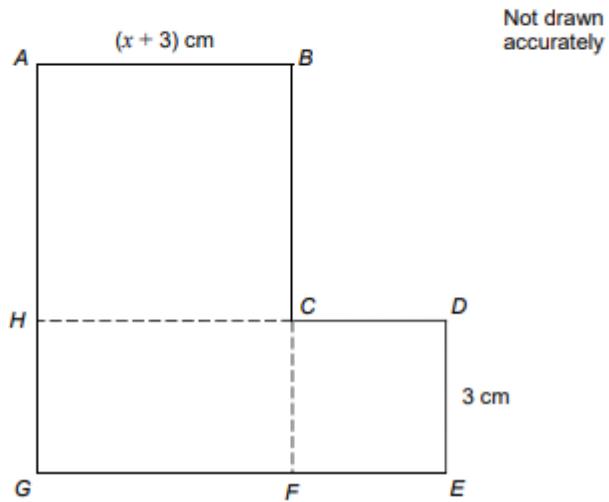
[2 marks]

AQA Sample Paper 1– Morning (Non-Calculator) Foundation Tier

14.

- 30 *ABCH* is a square.
HCFG is a rectangle.
CDEF is a square.

They are joined to make an L-shape.



Show that the total area of the L-shape, in cm^2 , is $x^2 + 9x + 27$

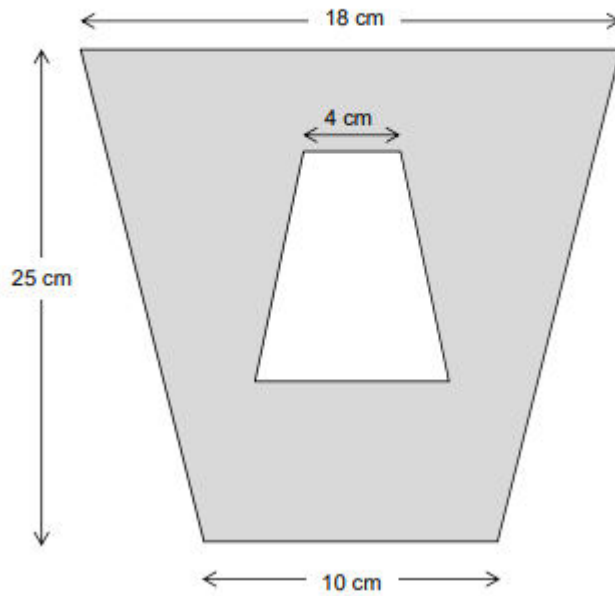
[4 marks]

AQA Sample Paper 2– Morning (Calculator) Foundation Tier

15.

30 A pattern is made from two **similar** trapeziums.

Not drawn accurately



Show that the shaded area is 294 cm^2

[4 marks]
