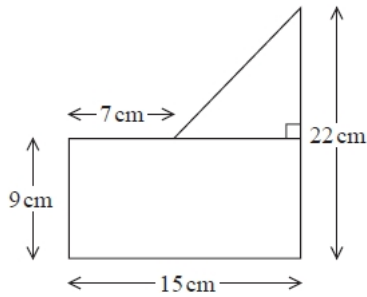


Area of Compound Shapes Past Paper Questions



Q1.



Here is a shape made from a rectangle and a triangle.

Work out the total area of the shape.

..... cm²

(Total for question = 3 marks)

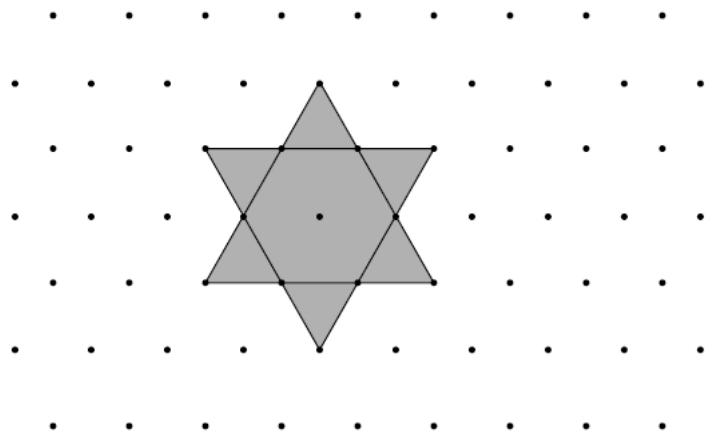
Q2.

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 cm².

Work out the area of the regular hexagon.



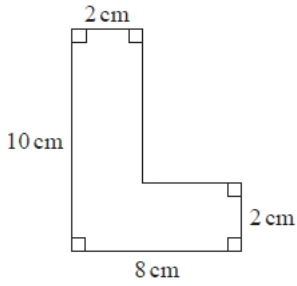
..... cm²

(Total for question = 2 marks)



Q3.

Work out the area of the shape.



..... cm²

(Total for question is 2 marks)

Q4.

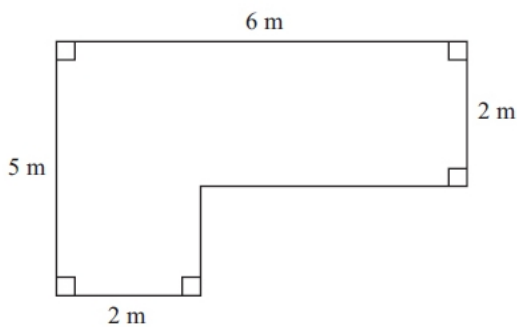


Diagram **NOT** accurately drawn

* The diagram shows the plan of the floor of Mrs Phillips' living room.

Mrs Phillips is going to cover the floor with floor boards.

One pack of floor boards will cover 2.5 m².

How many packs of floor boards does she need?

You must show your working.

(Total for Question is 4 marks)



Q5.

The diagram shows a semicircle drawn inside a rectangle.

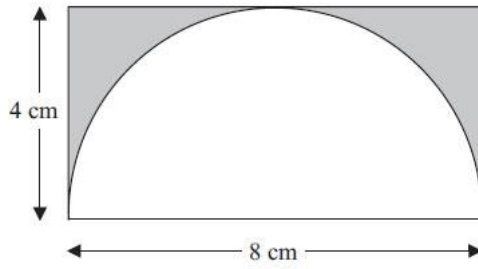


Diagram **NOT**
accurately drawn

The semicircle has a diameter of 8 cm.

The rectangle is 8 cm by 4 cm.

Work out the area of the shaded region.

Give your answer correct to 3 significant figures.

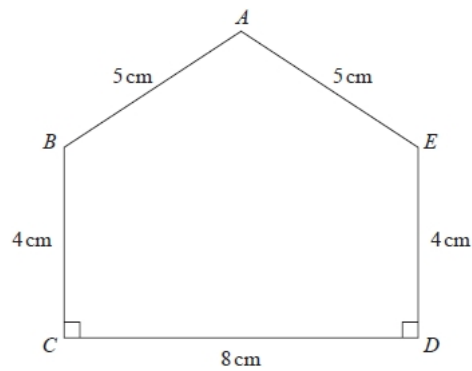
..... cm²

(Total for Question is 4 marks)



Q6.

ABCDE is a pentagon.



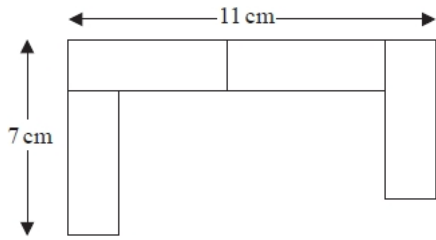
Work out the area of *ABCDE*.

..... cm²

(Total for question = 5 marks)



Q7.



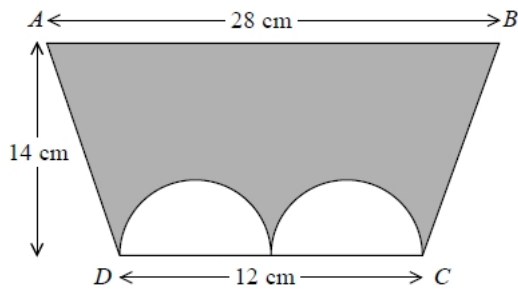
A pattern is made using identical rectangular tiles.

Find the total area of the pattern.

..... cm²

(Total for question is 4 marks)

Q8.



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 = 4 marks)



Q9.

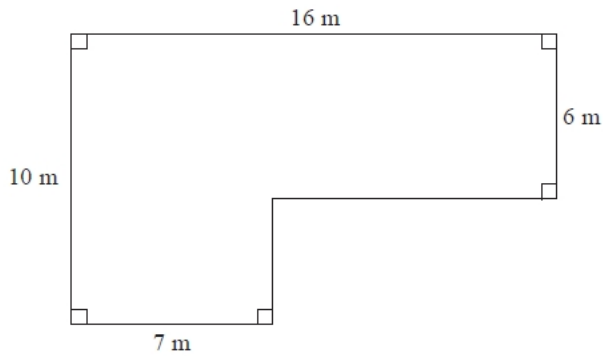


Diagram NOT accurately drawn

*The diagram shows the plan of a small field.

Kevin is going to keep some pigs in the field.

Each pig needs an area of 36 square metres.

Work out the greatest number of pigs Kevin can keep in the field.

(Total for Question is 4 marks)

Q10.

* The diagram shows the floor plan of Mary's conservatory.

Mary is going to cover the floor with tiles.

The tiles are sold in packs.

One pack of tiles will cover 2m^2

A pack of tiles normally costs £24.80

Mary gets a discount of 25% off the cost of the tiles.

Mary has £100. Does Mary have enough money to buy all the tiles she needs?

You must show all your working.

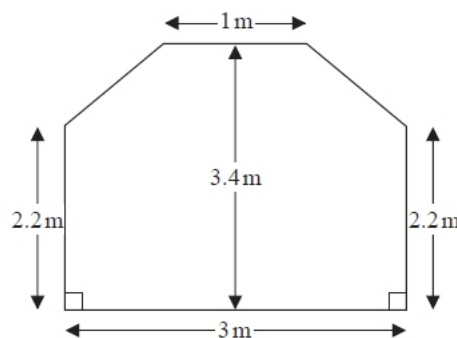


Diagram NOT accurately drawn

(Total for question = 5 marks)



Q11.

* The diagram shows the plan of a floor.

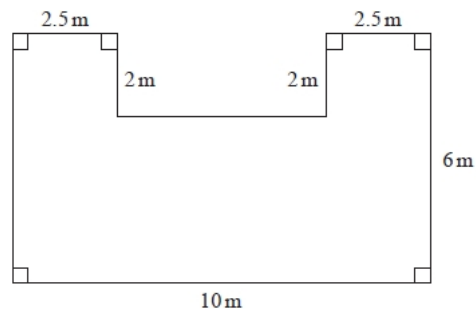


Diagram NOT
accurately drawn

Angie is going to varnish the floor.

She needs 1 litre of varnish for 5 m^2 of floor.

There are 2.5 litres of varnish in each tin of varnish.

Angie has 3 tins of varnish.

Does she have enough varnish for all the floor?

You must show all your working.

(Total for question = 5 marks)



Q12.

* The diagram shows the floor plan of Jill's dining room.

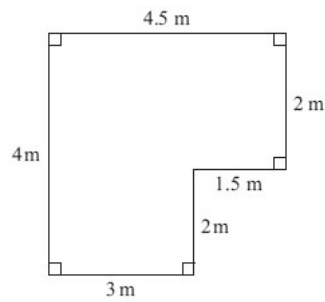


Diagram NOT
accurately drawn

Jill is going to cover the floor with wooden floorboards.

The floorboards are sold in packs.

One pack of floorboards will cover 2.25 m^2 .

Work out how many packs Jill needs.

You must show all your working.

(Total for Question is 4 marks)



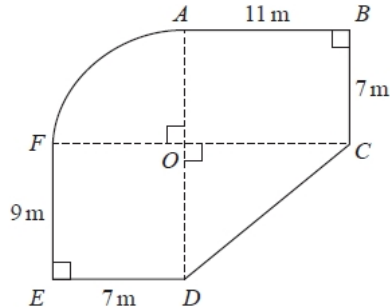
Q13.

The diagram shows a plan of Jason's garden.

$ABCO$ and $DEFO$ are rectangles.

CDO is a right-angled triangle.

AFO is a sector of a circle with centre O and angle $AOF = 90^\circ$



Jason is going to cover his garden with grass seed.

Each bag of grass seed covers 14 m^2 of garden.

Each bag of grass seed costs £10.95

Work out how much it will cost Jason to buy all the bags of grass seed he needs.

£

(Total for question = 5 marks)