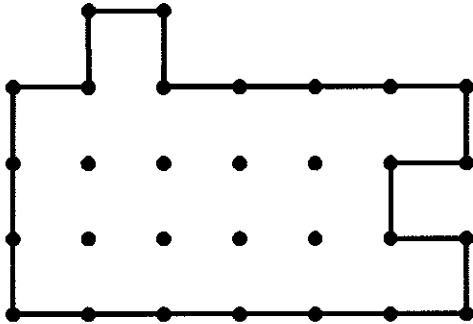


MEASUREMENT YEARS 7 AND 8

Use $\pi = 3.1$ in these questions

THE NEXT 2 ITEMS REFER TO THE FOLLOWING SHAPE.



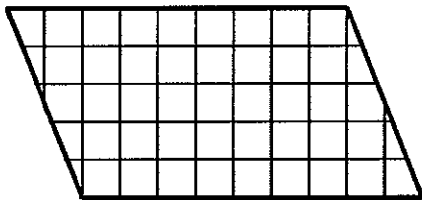
1 The area of the shape is:

- A 17 squares B 18 squares C 20 squares D 28 squares

2 The perimeter of this shape is:

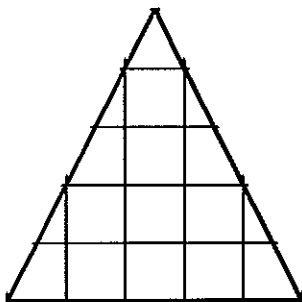
- A 16 units B 18 units C 20 units D 22 units

3 The area of this parallelogram is:



- A 45 square units B 55 square units
C 60 square units D More information is needed to determine the area of this shape.

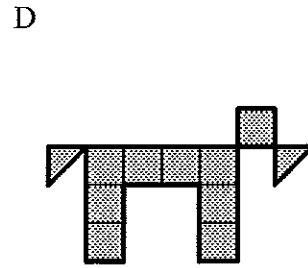
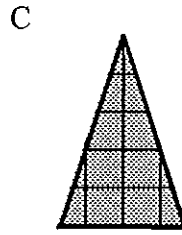
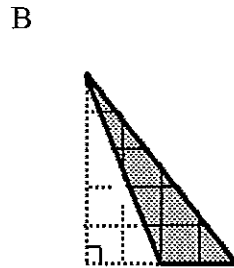
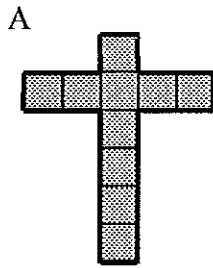
4



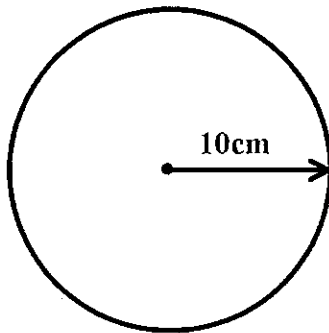
The area occupied by this triangle is closest to:

- A 8 squares
B 13 squares
C 25 squares
D More information is needed to determine the area of this shape

5 All of these shapes have an area of 10 square units, except one. Which one is the exception?



6

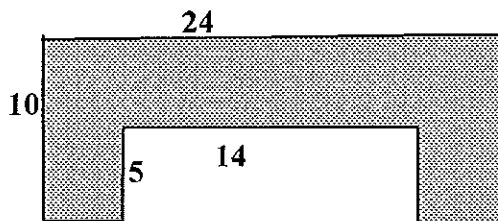


The circumference of this circle is, correct to the nearest unit:

- A 31 cm
- B 62 cm
- C 310 cm
- D 1240 cm

THE NEXT 2 ITEMS REFER TO THE FOLLOWING INFORMATION.

This is the end of a wooden child's toy, used as a tunnel in a set of building bricks.



All measurements are in centimetres, and all sides are perpendicular to one another. The shape is symmetrical.

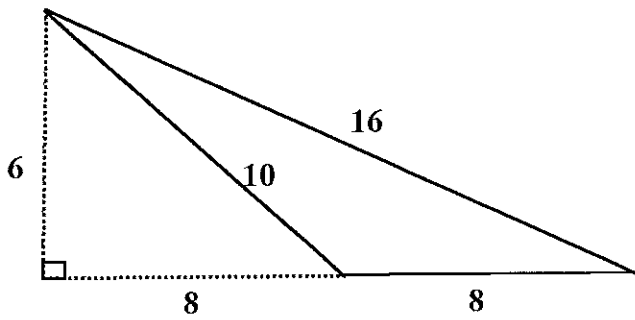
7 The perimeter of this shape is:

- A 44 cm
- B 58 cm
- C 78 cm
- D More information is needed to determine the perimeter of this shape.

8 The shaded area is:

- A 78 cm²
- B 170 cm²
- C 310 cm²
- D More information is needed to determine the area of this shape.

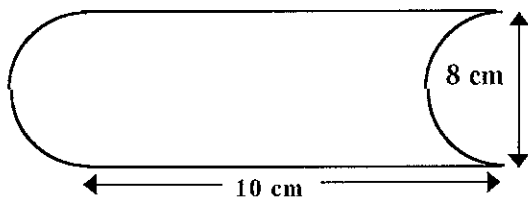
9 All measurements are in centimetres.



The perimeter and area of this triangle are, respectively:

- A. 49 cm and 48 cm²
- B. 35 cm and 24 cm²
- C. 59 cm and 24 cm²
- D. 35 cm and 48 cm²

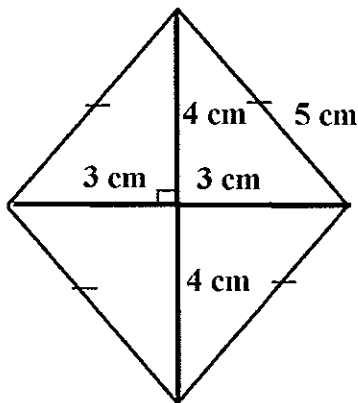
10 This shape has two semi-circular ends.



The perimeter of this shape is, correct to 1 decimal place:

- A. 32.4 cm
- B. 36.0 cm
- C. 44.8 cm
- D. 80.0 cm

THE NEXT 2 ITEMS REFER TO THE FOLLOWING DIAGRAM



11 The perimeter of this rhombus is:

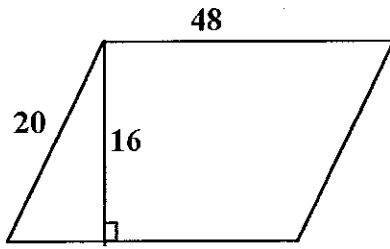
- A. 19 cm
- B. 20 cm
- C. 34 cm
- D. There is insufficient information.

12 The area of this rhombus is:

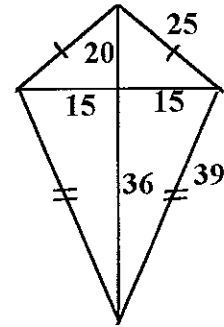
- A. 24 cm²
- B. 25 cm²
- C. 40 cm²
- D. 48 cm²

- 13 Which one of the following shapes has a perimeter of 128 cm?
All lengths are in centimetres.

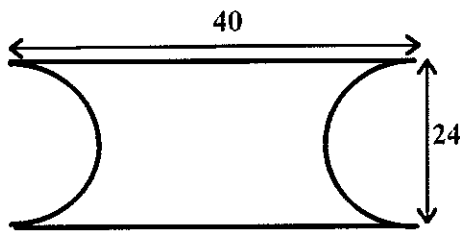
A



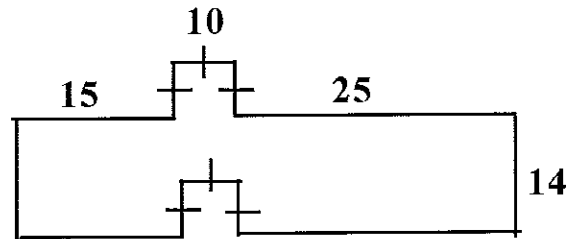
B



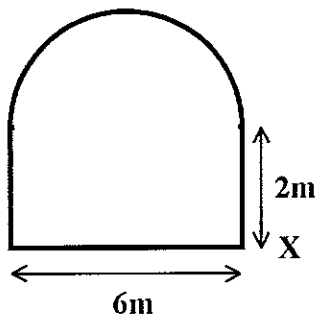
C



D



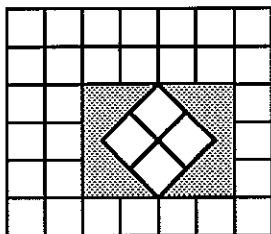
- 14 There was a small garden bed with a semi-circular end, as shown. A snail crawled around the edge of this bed one night, starting at point X. The distance it crawled was:



- A 16 m
B 19.3 m
C 26.6 m
D Unable to be determined without further information

THE NEXT 3 ITEMS REFER TO THE FOLLOWING INFORMATION

This diagram represents a bathroom floor. The square tiles used to tile most of the floor shown here as unshaded squares, were coloured green. The shaded part was made from tiny tiles which were coloured orange. Each green tile was 20 cm in length.



- 15 The fraction of the whole bathroom floor area occupied by the orange tiles is:

A $\frac{2}{21}$

B $\frac{4}{21}$

C $\frac{5}{21}$

D None of these

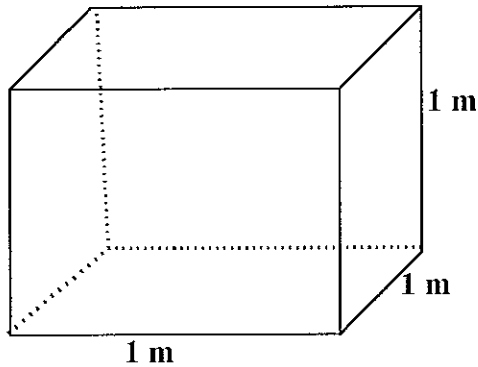
16 The area of the floor covered by the tiny orange tiles is:

- A 120 cm² B 160 cm² C 640 cm² D 3200 cm²

17 The tiler decided to put a special dark orange strip around the edge wherever the orange tiles and green tiles were in contact. The length of this strip was:

- A 220 cm B 280 cm C 440 cm D None of these

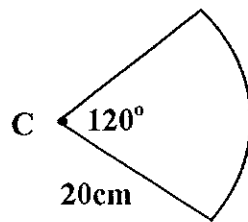
18



The volume of this box is:

- A 1 m³
 B 2 m³
 C 3m³
 D 6 m³

19

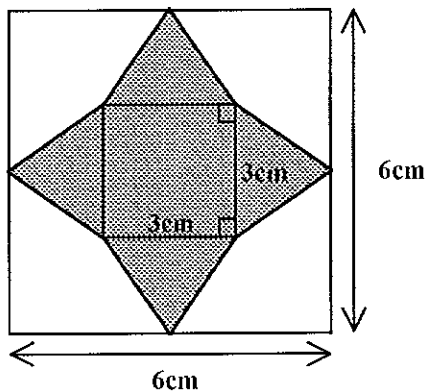


This was a piece of ham and pineapple pizza eaten by Toby at a party. C was the centre of this circular pizza.

The area of pizza left for everyone else to the nearest unit, was:

- A. 413 cm² B 827 cm² C 2563 cm² D 4800 cm²

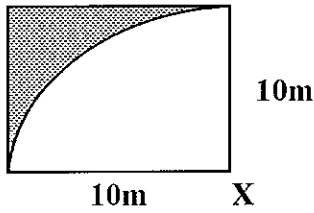
20



The area of this 4 pointed star is:

- A 18 cm²
 B 27 cm²
 C 45 cm²
 D None of these.

21

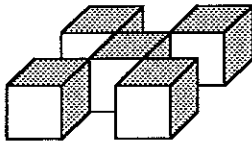


A goat was tethered to a post at X, the corner of a square paddock, of side 10 m, by a rope 10 m. The paddock was completely grassed.

The percentage of available grass it could not eat was, to the nearest unit:

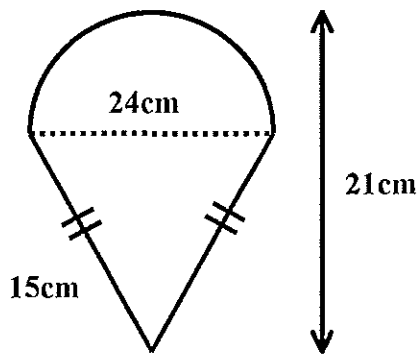
- A 22%
- B 23%
- C 24%
- D 25%

22 Each of these bricks is a cube 2 cm in length. The total volume of this shape is:



- A 10 cm³
- B 20 cm³
- C 40 cm³
- D 120 cm³

23



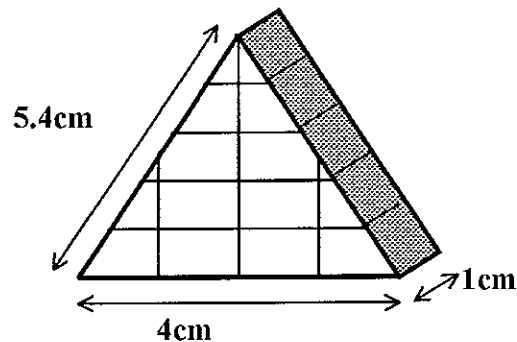
This is a cross section of an icecream in a cone.

The area of the cross section is:

- A 331.2 cm²
- B 403.2 cm²
- C 1072.8 cm²
- D Unable to be determined unless more information is provided.

THE NEXT 2 QUESTIONS REFER TO THE INFORMATION BELOW.

This is a solid symmetrical triangle made for an advertising display. It is made from wooden blocks which were originally cubes of length 1 cm, cut into shape then glued together. The front and back triangles are painted red. The edge strips and underneath are painted black.



24 The area of the red paint is:

- A 10 cm²
- B 20 cm²
- C 21.6 cm²
- D 40 cm²

25 The area of black paint is:

- A 5.4 cm²
- B 10.8 cm²
- C 14.8 cm²
- D 16.2 cm²

