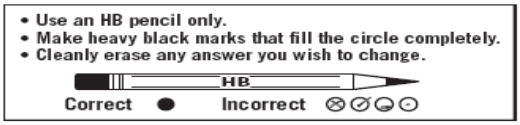
Name: _____

Measurement

Student Answer Sheet

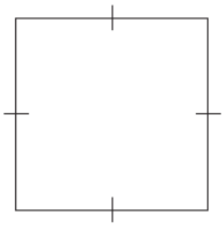


PLEASE NUMBER THE QUESTIONS AS YOU GO THROUGH

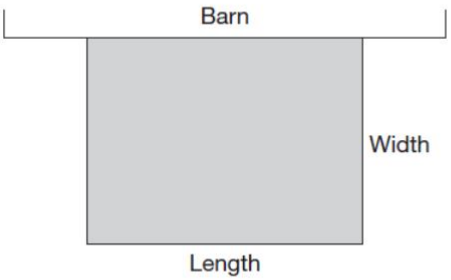
1. Ⓐ Ⓑ Ⓒ Ⓓ
2. Ⓐ Ⓑ Ⓒ Ⓓ
3. Ⓐ Ⓑ Ⓒ Ⓓ
4. Ⓐ Ⓑ Ⓒ Ⓓ
5. Ⓐ Ⓑ Ⓒ Ⓓ
6. Ⓐ Ⓑ Ⓒ Ⓓ
7. Ⓐ Ⓑ Ⓒ Ⓓ
8. Ⓐ Ⓑ Ⓒ Ⓓ
9. Ⓐ Ⓑ Ⓒ Ⓓ
10. Ⓐ Ⓑ Ⓒ Ⓓ
11. Ⓐ Ⓑ Ⓒ Ⓓ
12. Ⓐ Ⓑ Ⓒ Ⓓ
13. Ⓐ Ⓑ Ⓒ Ⓓ
14. Ⓐ Ⓑ Ⓒ Ⓓ
15. Ⓐ Ⓑ Ⓒ Ⓓ
16. Ⓐ Ⓑ Ⓒ Ⓓ

Please answer the multiple choice questions below on the bubble sheet and hand-in your completed work.

Show your work in the area provided.

Chris has a square garden with an area of 38.4 m^2, as shown in the diagram.  He decreases the length of each side by 1.7 m to make a smaller garden. Which is closest to the perimeter of the smaller garden? **a** 37 m **b** 32 m **c** 25 m **d** 18 m	
Ella wants a rectangle with • a perimeter of 100 cm and • the largest possible area. What are the dimensions of the rectangle that satisfies her conditions? **a** 10 cm × 10 cm **b** 20 cm × 30 cm **c** 25 cm × 25 cm **d** 40 cm × 60 cm	

Tom uses fencing to create a rectangular horse enclosure. He uses the side of a barn as one of the sides of the enclosure.



Tom has 48 metres of fencing to use for the three sides of the rectangular enclosure.

Which set of dimensions will use the entire 48 m of fencing?

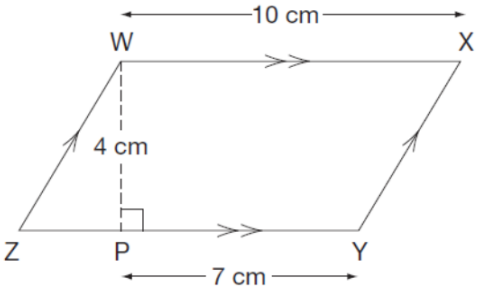
a width is 8 m, length is 6 m

b width is 12 m, length is 12 m

c width is 24 m, length is 12 m

d width is 12 m, length is 24 m

Consider the parallelogram shown below.



What is the perimeter of WXYZ?

a 28 cm

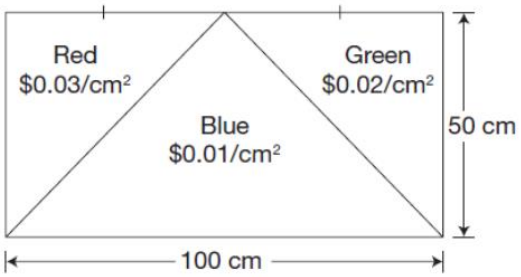
b 30 cm

c 31 cm

d 34 cm

Pablo is designing a rectangular flag that consists of three coloured triangles.

The picture below shows the colours of the triangles and the cost of each colour of material.



What is the total cost of the material?

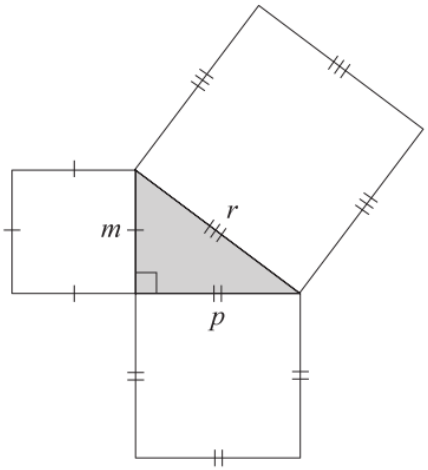
a $75.00

b $87.50

c $150.00

d $175.00

The diagram below is made of a right triangle and three squares.



Which of the following is represented by this diagram?

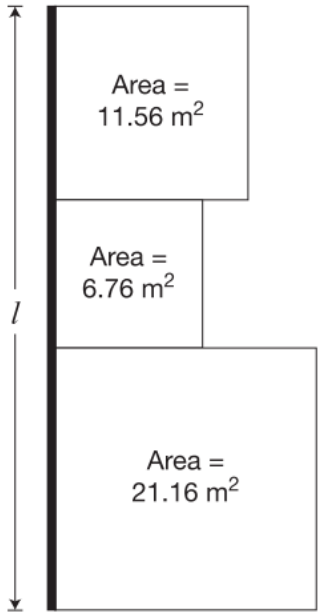
a $p^2 = r^2 - m^2$

b $p^2 = m^2 - r^2$

c $r^2 = p^2 - m^2$

d $r^2 = m^2 - p^2$

Marc has a garden that is made up of three square sections. He builds a fence on one side of the garden as shown below.



Which of the following is closest to the length of the fence, l?

a 19.7 m

b 10.6 m

c 9.9 m

d 6.3 m

The following is the formula for the area of a circle:

$$A = \pi r^2$$

If the radius of a circle is 1.25 cm, which of the following is closest to its area?

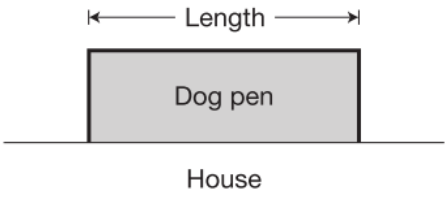
a 15.4 cm^2

b 7.9 cm^2

c 4.9 cm^2

d 3.9 cm^2

Marcus is building a rectangular dog pen along the side of his house as shown below.



Marcus has 20 m of fencing for the 3 sides of the dog pen.

What is the length of the dog pen with the maximum area?

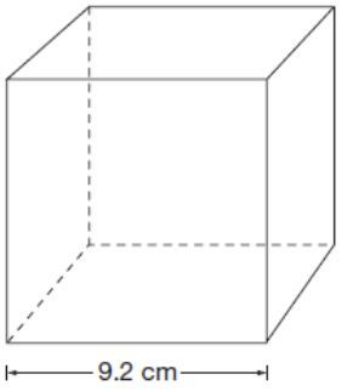
a 4 m

b 5 m

c 10 m

d 12 m

A decoration is packed in a box shaped like a cube as shown below.



The decoration has a volume of 651 cm^3.

Approximately how much empty space remains in the box?

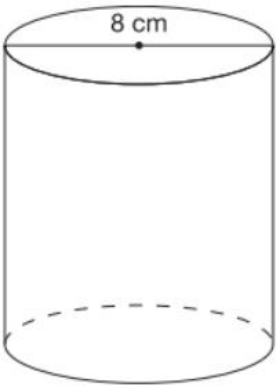
a 128 cm^3

b 143 cm^3

c 623 cm^3

d 779 cm^3

The cylinder below has a volume of $150\ \text{cm}^3$.



Which of the following is closest to the area of the lateral surface of the cylinder?

Hint:
$V_{\text{cylinder}} = \pi r^2 h$
$A_{\text{lateral surface}} = 2\pi rh$

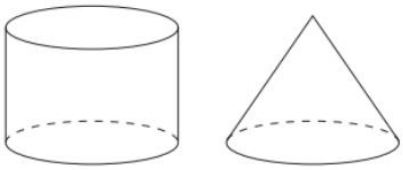
a $38\ \text{cm}^2$

b $75\ \text{cm}^2$

c $150\ \text{cm}^2$

d $300\ \text{cm}^2$

The cylinder and the cone shown below have the same height and radius.



Volume of cylinder = ? × Volume of cone

What number completes this equation?

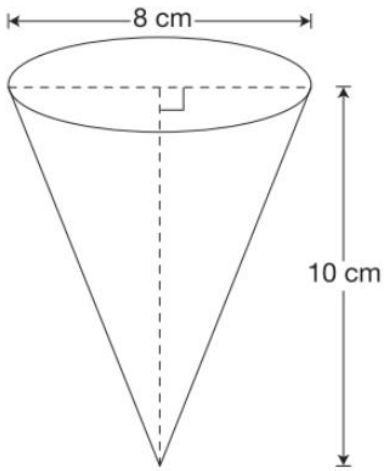
a 3

b 2

c $\frac{1}{2}$

d $\frac{1}{3}$

An open-topped paper drinking cup in the shape of a cone is pictured below.



Which is closest to the amount of paper required to make the cup?

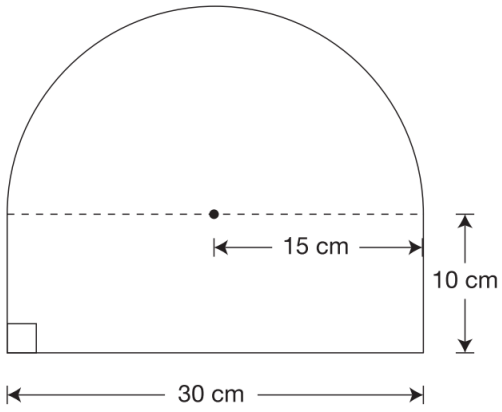
a 185 cm^2

b 167 cm^2

c 135 cm^2

d 126 cm^2

The sign below is made up of a rectangle and a semicircle.



Which of the following is closest to the area of the sign?

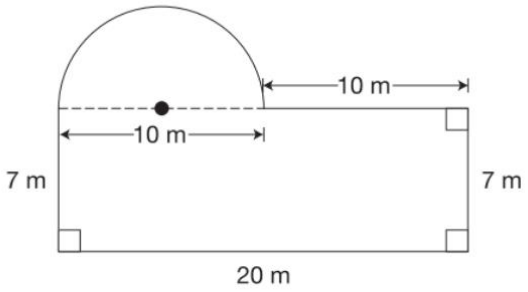
a 347 cm^2

b 653 cm^2

c 1007 cm^2

d 1410 cm^2

A garden is in the shape of a rectangle and a semicircle as shown below.



Which of the following is closest to the amount of fencing needed to enclose the garden?

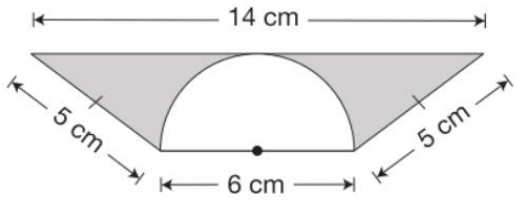
a 60 m

b 70 m

c 75 m

d 85 m

The diagram below is made of a trapezoid and a semicircle.



Which is closest to the area of the shaded part of the diagram?

a 2 cm^2

b 16 cm^2

c 21 cm^2

d 36 cm^2