Perimeter Revision Exercise



1) Calculate the perimeter of each of the following shapes.

2) The diagram below shows a speedway track.



The straights are each 100metres long.

The bends are semi-circles as shown.

Calculate the perimeter of the inside of the track.

3) The diagram shows a birthday card.
The card consists of a rectangle and a semi-circle.
There is gold ribbon all around the border of the card.
Calculate the total length of gold ribbon needed for this card.
Give your answer to the nearest centimetre.



4) A sign for a mushroom consists of a semi-circle and a rectangle.



There is a red border painted all around the edge of the sign.

Calculate the total length of the red border.

Give your answer correct to the nearest centimetre.

5) This mirror is in the shape of a rectangle with semi-circular ends.It has a wooden edge all the way round the outside.



Calculate the total length of the wooden edge.

Give your answer to the nearest centimetre.

ANSWERS

- 1) a) P = 9 + 5 + 9 + 5 = 28cm
 - b) P = 11 + 9.5 + 6 = 26.5 cm
 - c) P = 15 + 12 + 7.5 + 6 = 40.5m
 - d) P = 16 + 16 + 6 + 11 + 10 + 5 = 64cm
 - e) P = 20 + 4 + 6 + 9 + 8 + 9 + 6 + 4 = 66m
- 2) $C = \pi d = 3 \cdot 14 \times 70 = 219 \cdot 8m$ Perimeter = 219·8 + 100 + 100 = 419·8m
- 3) $C = \pi d = 3 \cdot 14 \times 12 = 37 \cdot 68$ cm Length of Ribbon = ½ of 37.68 + 10 + 12 + 10 = 50.84 = 51cm
- 4) $C = \pi d = 3 \cdot 14 \times 80 = 251 \cdot 2$ cm Length of Red Border = ½ of $251 \cdot 2 + 30 + 50 + 20 + 50 + 20 = 305 \cdot 6 = 306$ cm
- 5) $C = \pi d = 3 \cdot 14 \times 40 = 125 \cdot 6$ cm Length of Wooden Edge = $125 \cdot 6 + 30 + 30 = 185 \cdot 6 = 186$ m