

CHAPTER 9

A. Manjeet is carving various geometrical shapes to be pasted on the walls of a kindergarten class. He wants to decorate all the shapes and he needs to find the perimeter and area of these shapes to decide how much decoration material and paint he needs to purchase.

1. What is the perimeter and area of a rectangular cardboard of length 6 cm and breadth 3.5 cm?

- | | |
|---------------------------------|---------------------------------|
| a. 19 cm and 6 cm ² | b. 21 cm and 9 cm ² |
| c. 24 cm and 16 cm ² | d. 19 cm and 21 cm ² |

2. What is the area of a square piece whose diagonal is 8 cm?

- | | | | |
|-----------------------|-----------------------|----------------------|----------------------|
| a. 64 cm ² | b. 32 cm ² | c. 64 m ² | d. 32 m ² |
|-----------------------|-----------------------|----------------------|----------------------|

3. Manjeet is thinking of putting decorations along the diagonals of one of the walls of dimensions 4 m by 3 m. What is the length of the decoration material needed?

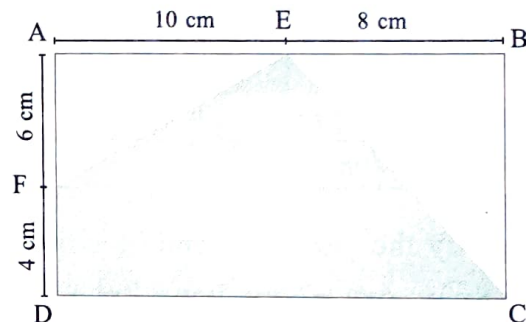
- | | | | |
|---------|---------|--------|---------|
| a. 25 m | b. 10 m | c. 5 m | d. 15 m |
|---------|---------|--------|---------|

4. What is the cost of painting a parallelogram of base 9 cm and corresponding height 5.5 cm @ ₹5 per sq. cm?

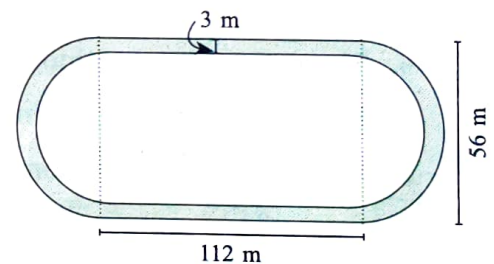
- | | |
|------------|-----------|
| a. ₹247.50 | b. ₹49.50 |
| c. ₹123.75 | d. ₹165 |

5. What is the area of the shaded region?

- | |
|---------------|
| a. 180 sq. cm |
| b. 30 sq. cm |
| c. 110 sq. cm |
| d. 40 sq. cm |



B. A racetrack is in the form of a rectangle with outer dimensions being 112 m by 56 m with semicircles on the shorter sides. The track is 3 m wide. The inner rectangle is designed to be a ground which can be used for playing football or similar activities.



1. What is the length of the outer track to be fenced?

- | | | | |
|----------|----------|----------|----------|
| a. 576 m | b. 336 m | c. 352 m | d. 400 m |
|----------|----------|----------|----------|

2. What is the cost of fencing @ ₹6 per m if fencing is to be done on both the outer and inner side of the track?

- | | | | |
|-------------|-------------|-------------|----------|
| a. ₹4781.14 | b. ₹5381.40 | c. ₹4686.86 | d. ₹2400 |
|-------------|-------------|-------------|----------|

3. The track needs to be painted. What is the area of the track?

- | | | | |
|--------------|-----------------|----------------|---------------|
| a. 672 sq. m | b. 1171.7 sq. m | c. 499.7 sq. m | d. 1000 sq. m |
|--------------|-----------------|----------------|---------------|

4. The rectangular field needs to be mowed properly for a football match. What is the cost of mowing the field at ₹8 per sq.m?

- | | | | |
|-----------|-----------|-----------|-----------|
| a. ₹94976 | b. ₹50176 | c. ₹44800 | d. ₹42400 |
|-----------|-----------|-----------|-----------|

5. A race takes place where each racer takes 3 laps. How much distance does each racer cover in this race approximately? (Assume each racer is running closest to the inner track to minimize the distance.)

a. 1143 m

b. 1381 m

c. 1207.7 m

d. 1524 m