

2D shapes and 3D shapes

Perimeter : Perimeter of any 2D figure is found by adding all the sides.

Perimeter of rectangle: $2 (L + W)$

Where 'L' means the Length and 'W' means Width of the rectangle.

Exercise

1-2) Find the perimeter and the area of the following Rectangles having.

Area of Rectangle: $L \times W$

- | | | |
|--|------------------|-------------|
| a) $L = 3 \text{ cm}$, $W = 2 \text{ cm}$ | Perimeter= _____ | Area= _____ |
| b) $L = 5 \text{ cm}$, $W = 3 \text{ cm}$ | Perimeter= _____ | Area= _____ |
| c) $L = 7 \text{ cm}$, $W = 5 \text{ cm}$ | Perimeter= _____ | Area= _____ |
| d) $L = 3.5 \text{ cm}$, $W = 2.5 \text{ cm}$ | Perimeter= _____ | Area= _____ |
| e) $L = 5.7 \text{ cm}$, $W = 2.8 \text{ cm}$ | Perimeter= _____ | Area= _____ |

3) Find the perimeter of the regular polygon .

- | | |
|--|------------------|
| a) Hexagon with length of side $L = 5 \text{ cm}$ | Perimeter= _____ |
| b) Octagon with length of side $L = 7 \text{ cm}$ | Perimeter= _____ |
| c) Pentagon with length of side $L = 6 \text{ cm}$. | Perimeter= _____ |
| d) Square with length of side $L = 3 \text{ cm}$ | Perimeter= _____ |
| e) Triangle with length of side $L = 4 \text{ cm}$ | Perimeter= _____ |

4) Find the area and perimeter of the following square

- | | |
|-------------------------------------|-------------------------------|
| a) Length of side: 12 cm | Area= _____, Perimeter= _____ |
| b) Length of side: 4.5 cm | Area= _____, Perimeter= _____ |
| c) Length of side: 7 cm | Area= _____, Perimeter= _____ |
| d) Length of side: 8.3 cm | Area= _____, Perimeter= _____ |
| e) Length of side: 3 m | Area= _____, Perimeter= _____ |

5) Find the side of the square

- | | |
|---|----------------|
| a) Perimeter of square is 20 cm . | Length = _____ |
| b) Perimeter of square is 32 cm . | Length = _____ |
| c) Area of square is 25 cm^2 | Length = _____ |
| d) Area of square is 16 cm^2 | Length = _____ |
| e) Perimeter of square is 16 cm , | Length = _____ |

Cuboids and its properties.

Cuboid is 3 dimensional solid.

Number of faces: 6

Number of Vertex : 8

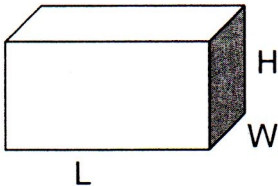
Number of edges: 12

3 dimensions: Length (L), Width (W) and Height (H)

Volume: $L \times W \times H$

Surface Area: $2(L \times W + W \times H + H \times L)$

Total Edge Length : $4(L + W + H)$



6) Find the Volume, Surface Area and Total Edge Length of the following cuboids.

Length : 5 cm Width : 3 cm Height : 2 cm

a) Volume _____

b) Surface Area _____

c) Total Edge Length _____

7) Length : 3 cm Width : 2 cm Height : 1 cm

a) Volume _____

b) Surface Area _____

c) Total Edge Length _____

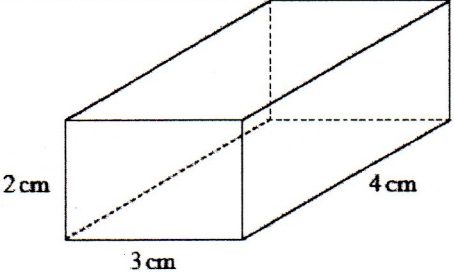
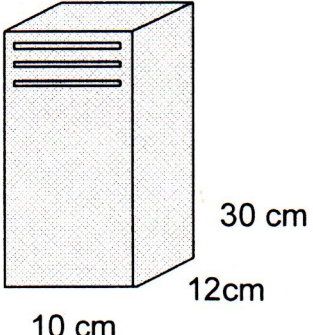
8) Length : 30 cm Width : 20 cm Height : 10 cm

a) Volume _____

b) Surface Area _____

c) Total Edge Length _____

9-10) Find the volume , surface area and total edge length of the given figure.

 <p>A 3D line drawing of a cuboid. The front vertical edge is labeled '2cm', the front horizontal edge is labeled '3cm', and the receding horizontal edge on the right is labeled '4cm'.</p>	 <p>A 3D line drawing of a cuboid. The front horizontal edge is labeled '10 cm', the receding horizontal edge on the right is labeled '12cm', and the vertical edge on the right is labeled '30 cm'.</p>
a) Volume _____	a) Volume _____
b) Surface Area _____	b) Surface Area _____
c) Total Edge Length _____	c) Total Edge Length _____