STD - V Exercise - 10.2

A. Find the volume of these objects.

1. Given length of the shoe box = 25cm

Given breadth of the shoe box = 15 cm

Given height of the shoe box = 7 cm

Required volume of the shoe box = l × b × h

= 25cm × 15cm × 7cm

= 2625 cu. cm

$$\begin{array}{r} 25 \\ \times 15 \\ \hline 125 \\ 250 \\ \hline 375 \\ \times 7 \\ \hline 2625 \end{array}$$

Ans. The required volume of the shoe box is 2625 cu. cm.

2) Given length of the book shelf = 70cm

Given breadth of the book shelf = 15 cm

Given height of the book shelf = 80 cm

Required volume of the book shelf = l × b × h

= 70cm × 15cm × 80cm.

= 84000 cu. cm.

$$\begin{array}{r} 70 \\ \times 15 \\ \hline 350 \\ 700 \\ \hline 1050 \\ \times 8 \\ \hline 8400 \end{array}$$

Ans. The required volume of the book

Shelf is 84000 cu.cm.

5) Given length of a side of tin = 35cm

Given breadth of the tin = 35 cm

Given height of the tin = 35 cm

Required volume of the tin = $l \times b \times h$

$= 35cm \times 35cm \times 35cm$

$= 42875$ cu.cm.

Ans. The volume of the tin is 42875 cu.cm.

$$\begin{array}{r} 35 \\ \times\ 35 \\ \hline 175 \\ 1050 \\ \hline 1225 \\ \times\ 35 \\ \hline 6125 \\ +36750 \\ \hline 42875 \end{array}$$

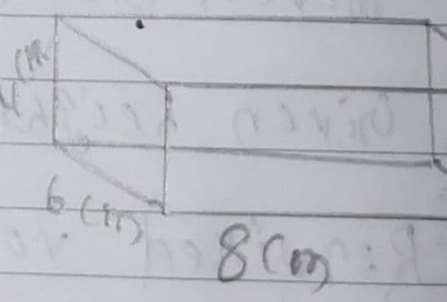
(1) similarly do all.

B) Find the volume of the solids of the given dimensions.

1. Given length of the cuboid = 8cm

Given breadth of the cuboid = 6cm

Given height of the cuboid = 4cm



Required volume of the cuboid = $l \times b \times h$

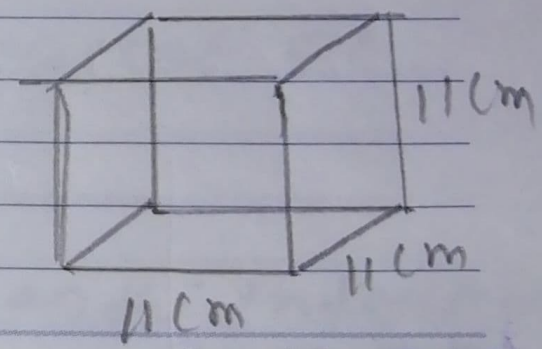
$= 8cm \times 6cm \times 4cm$

$= 192 cu\,cm$

$$\begin{array}{r} 48 \\ \times\ 4 \\ \hline 192 \end{array}$$

Ans. The required volume of the cuboid is 192 cu.cm.

2) Given side of the cube = 11cm



Required volume of the cube = $s \times s \times s$

$= 11cm \times 11cm \times 11cm$

$= 1331 cu.cm$

$$\begin{array}{r} 121 \\ \times\ 11 \\ \hline 121 \\ 1210 \\ \hline 1331 \end{array}$$

Ans. The required volume of the cube is 1331 cu.cm.

(1) Similarly do all.