.

Exercise 13A

Question 1:
(i) length =12cm, breadth = 8 cm and height = 4.5 cm
∴ Volume of cuboid = l x b x h
= (12 x 8 x 4.5) cm^3= 432 cm^3
∴ Lateral surface area of a cuboid = 2(l + b) x h
= [2(12 + 8) x 4.5] cm^2
= (2 x 20 x 4.5) cm^2 = 180 cm^2
∴ Total surface area cuboid = 2(lb +b h+ l h)
= 2(12 x 8 + 8 x 4.5 + 12 x 4.5) cm^2
= 2(96 +36 +54) cm^2
= (2 x186) cm^2
= 372 cm^2

(ii) Length 26 m, breadth =14 m and height =6.5 m
∴ Volume of a cuboid = l x b x h
= (26 x 14 x 6.5) m^3
= 2366 m^3
∴ Lateral surface area of a cuboid =2 (l + b) x h
= [2(26+14) x 6.5] m^2
= (2 x 40 x 6.5) m^2
= 520 m^2
∴ Total surface area = 2(lb+ bh + lh)
= 2(26 x 14+14 x6.5 +26 x6.5)
= 2 (364+91+169) m^2
= (2 x 624) m2= 1248 m^2.

(iii) Length = 15 m, breadth = 6m and height = 5 dm = 0.5 m
∴ Volume of a cuboid = l x b x h
= (15 x 6 x 0.5) m3=45 m^3.
∴ Lateral surface area = 2(l + b) x h
= [2(15 + 6) x 0.5] m^2
= (2 x 21x0.5) m2=21 m^2
∴ Total surface area =2(lb+ bh + lh)
= 2(15 x 6 +6 x 0.5+ 15 x 0.5) m^2
= 2(90+3+7.5) m^2
= (2 x 100.5) m^2
=201 m^2

(iv) Length = 24 m, breadth = 25 cm =0.25 m, height = 6m.
∴ Volume of cuboid = l x b x h
= (24 x 0.25 x 6) m^3.
= 36 m^3.
∴ Lateral surface area = 2(l + b) x h
= [2(24 +0.25) x 6] m^2
= (2 x 24.25 x 6) m^2
= 291 m^2.
∴ Total surface area =2(lb+ bh + lh)
=2(24 x 0.25+0.25x 6 +24 x 6) m^2

= 2(6+1.5+144) m^2

= (2 x151.5) m^2

=303 m^2.

********** END **********