

Rectangular Solids:

A. Definitions

A rectangular solid is a 3-dimensional figure in which all 6 sides are made up of rectangles.

B. Basic Memorizations

$$\text{Surface Area} = 2lw + 2lh + 2wh$$

$$\text{Volume} = lwh$$

C. Examples

Ex [1] Find the surface area of a rectangular solid with height 5cm, length 4cm, and width 2cm. _____ cm^2

a. The answer is $2(5)(4) + 2(5)(2) + 2(4)(2) = 40 + 20 + 16 = 56$.

Ex [2] Find the volume of a rectangular solid with height 4cm, length 4cm, and width 3cm. _____ cm^3 .

a. The answer is $4 \times 4 \times 3 = 48$.