Surface Areas and Volume of a Cuboid and Cube Ex 18.1 Q19

Answer :

The paint in the container can paint the area,

$A = 9.375\,m^2$

$= 93750\,cm^2$ {Since $1\,m = 100\,cm$}

Dimensions of a single brick,

Length$(l) = 22.5\,cm$

Breadth$(b) = 10\,cm$

Height$(h) = 7.5\,cm$

We need to find the number of bricks that can be painted

Surface area of a brick,

$A' = 2(lb + bh + hl)$

$= 2(22.5 \times 10 + 10 \times 7.5 + 7.5 \times 22.5)$

$= 2(225 + 75 + 168.75)$

$= 468.75 \times 2$

$= 937.50\,cm^2$

Number of bricks that can be painted

$= \dfrac{A}{A'}$

$= \dfrac{93750}{937.5}$

$= 100$

Hence $\boxed{100}$ bricks can be painted out of the container.

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