

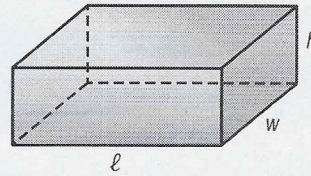
Lesson 3 Reteach

Surface Area of Rectangular Prisms

The **surface area** S.A. of a rectangular prism with length ℓ , width w , and height h is the sum of the areas of the faces.

Symbols $S.A. = 2\ell h + 2\ell w + 2hw$

Model



Example

Find the surface area of the rectangular prism.

Find the area of each face.

front and back

$$2\ell h = 2(8)(3) = 48$$

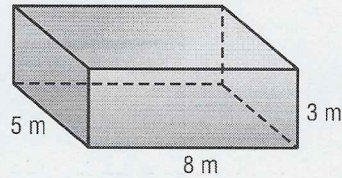
top and bottom

$$2\ell w = 2(8)(5) = 80$$

two sides

$$2hw = 2(3)(5) = 30$$

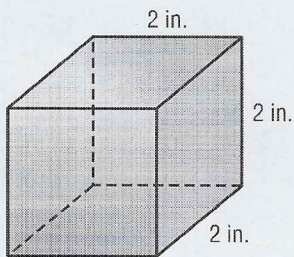
Add to find the surface area. The surface area is $48 + 80 + 30$ or 158 square meters.



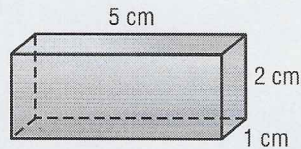
Exercises

Find the surface area of each rectangular prism.

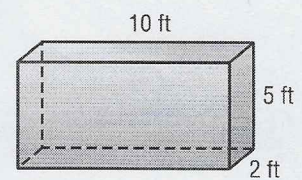
1.



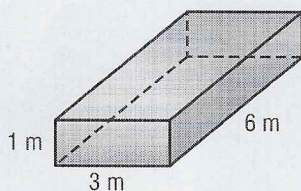
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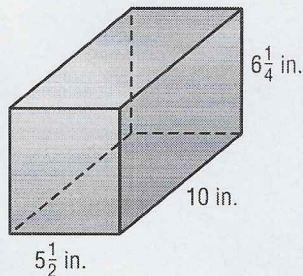
3.



4.



5.



6.

