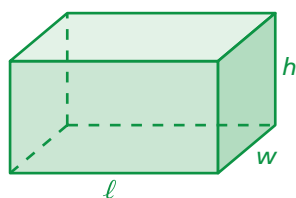


## Key Concept and Vocabulary

Surface Area of a Rectangular Prism

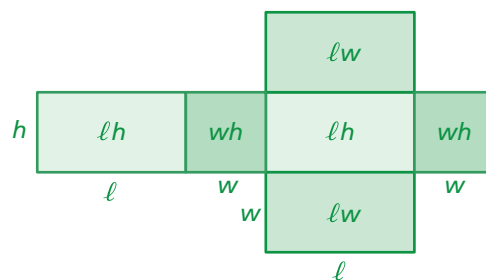


$$S = 2\ell w + 2\ell h + 2wh$$

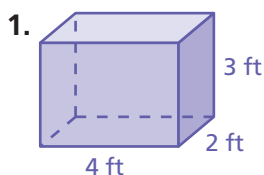


## Visual Model

Net for a Rectangular Prism



## Skill Example



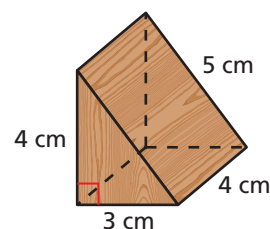
$$\begin{aligned} S &= 2(4 \cdot 2) + 2(4 \cdot 3) + 2(2 \cdot 3) \\ &= 16 + 24 + 12 \\ &= 52 \text{ ft}^2 \end{aligned}$$

## Application Example

2. Find the surface area of the block.

$$\begin{aligned} S &= 2\left(\frac{1}{2} \cdot 3 \cdot 4\right) + 4 \cdot 5 + 3 \cdot 4 + 4 \cdot 4 \\ &= 12 + 20 + 12 + 16 \\ &= 60 \end{aligned}$$

The surface area is  $60 \text{ cm}^2$ .



## PRACTICE MAKES PURR-FECT®

Check your answers at [BigIdeasMath.com](http://BigIdeasMath.com).

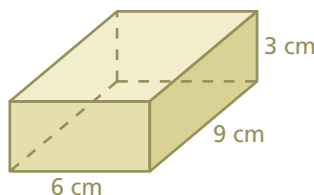
Find the surface area of the prism.

3. Rectangular Prism



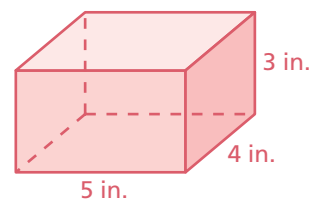
$$S = \underline{130 \text{ ft}^2}$$

4. Rectangular Prism



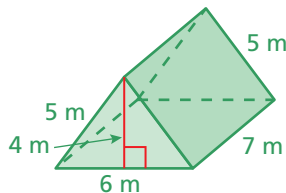
$$S = \underline{198 \text{ cm}^2}$$

5. Rectangular Prism



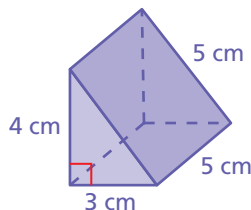
$$S = \underline{94 \text{ in.}^2}$$

6. Triangular Prism



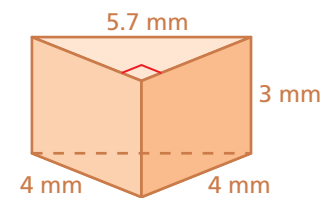
$$S = \underline{136 \text{ m}^2}$$

7. Triangular Prism



$$S = \underline{72 \text{ cm}^2}$$

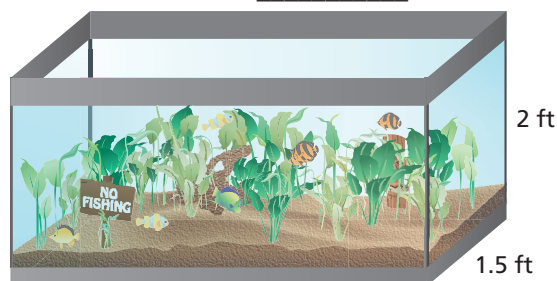
8. Triangular Prism



$$S = \underline{57.1 \text{ mm}^2}$$

9. **AQUARIUM** How much glass is used to make the four sides of the aquarium?  $22 \text{ ft}^2$

10. **AQUARIUM** How much glass is used to make the base of the aquarium?  $6 \text{ ft}^2$



4 ft

Skills Review Topic 26.3

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