REVIEW: Surface Areas of Prisms

Name _____

Key Concept and Vocabulary
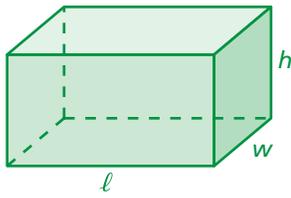
$$S = 2\ell w + 2\ell h + 2wh$$

Visual Model

Net for a Rectangular Prism

Skill Example

1.

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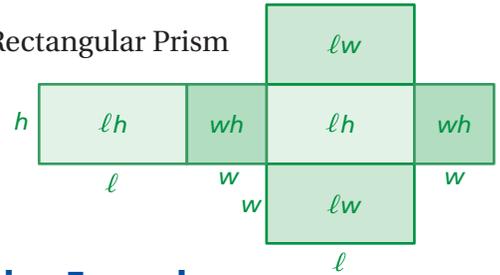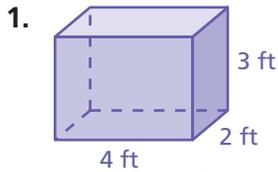
$$S = 2(4 \cdot 2) + 2(4 \cdot 3) + 2(2 \cdot 3)$$
$$= 16 + 24 + 12$$
$$= 52 \text{ ft}^2$$

Application Example

2. Find the surface area of the block.

$$S = 2\left(\frac{1}{2} \cdot 3 \cdot 4\right) + 4 \cdot 5 + 3 \cdot 4 + 4 \cdot 4$$
$$= 12 + 20 + 12 + 16$$
$$= 60 \text{ cm}^2$$

The area is 60 cm².

5 cm
4 cm
4 cm
3 cm
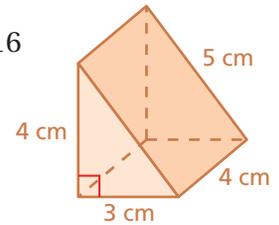
# PRACTICE MAKES *PURR*-FECT™

Check your answers at BigIdeasMath.com.

**Find the surface area of the prism.**

3. Rectangular Prism

1 ft
5 ft
10 ft

$S = $ _____

4. Rectangular Prism

3 cm
9 cm
6 cm
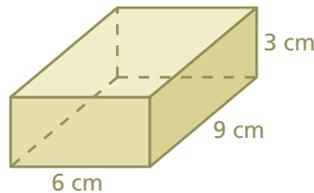
$S = $ _____

5. Rectangular Prism

3 in.
4 in.
5 in.

$S = $ _____
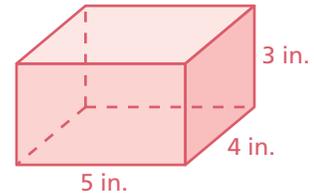
6. Triangular Prism

5 m
5 m
4 m
6 m
7 m

$S = $ _____
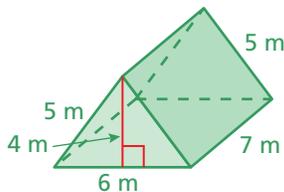
7. Triangular Prism

5 cm
4 cm
5 cm
3 cm
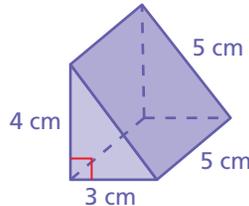
$S = $ _____

8. Triangular Prism

5.7 mm
3 mm
4 mm
4 mm
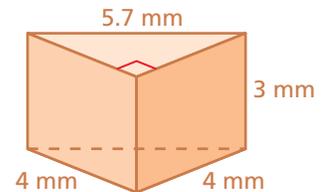
$S = $ _____

9. AQUARIUM How much glass is used to make the four sides of the aquarium? _____

10. AQUARIUM How much glass is used to make the base of the aquarium? _____

2 ft
1.5 ft
4 ft

Topic 12.2