

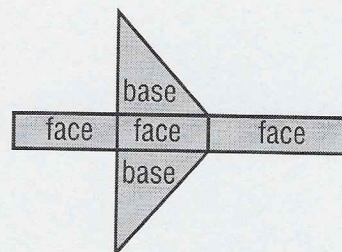
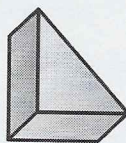
Lesson 4 Reteach

Surface Area of Triangular Prisms

Words

The surface area of the triangular prism is the sum of the areas of the two triangular bases and the three rectangular faces.

Model



Example 1

Find the surface area of the triangular prism.

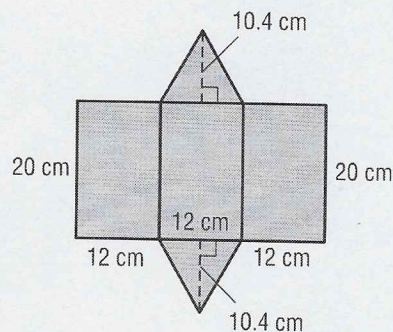
To find the surface area of the triangular prism, find the area of each face and add.

$$\text{area of each triangular base: } \frac{1}{2}(12)(10.4) = 62.4$$

$$\text{area of each rectangular face: } 12(20) = 240$$

Add to find the surface area.

$$62.4 + 62.4 + 240 + 240 + 240 = 1,084.8 \text{ square centimeters}$$



Example 2

Find the surface area of the triangular prism.

Find the area of each face and add. For this prism, each rectangular face has a different area.

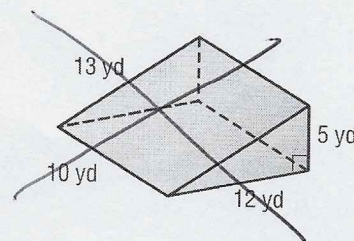
$$\text{area of each triangular base: } \frac{1}{2}(12)(5) = 30$$

$$\text{area of the rectangular faces: } 12(10) = 120$$

$$5(10) = 50$$

$$13(10) = 130$$

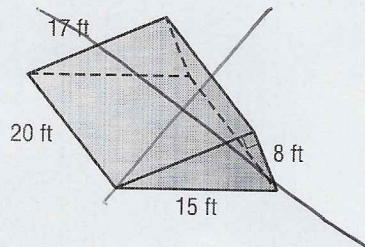
Add to find the surface area. $30 + 30 + 120 + 50 + 130 = 360$ square yards



Exercises

Find the surface area of each triangular prism.

1.



2.

