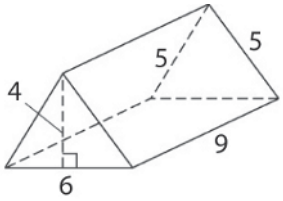
Name _____ Date _____ Class_____

LESSON 15-1

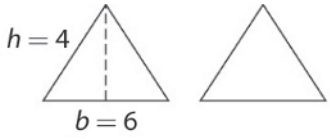
Nets and Surface Area

Reteach

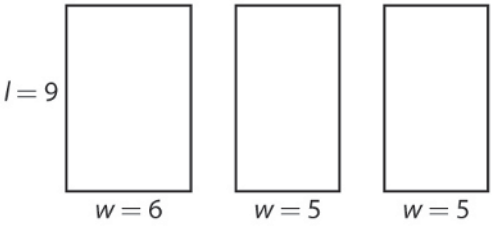


To find the surface area of the regular triangular prism above, first find the area of each face or base.

2 congruent triangular bases



3 rectangular faces



$A = \frac{1}{2}bh$

$= \frac{1}{2}(6 \bullet 4)$

$= 12$ square units

$A = lw$

$= (9 \bullet 6)$

$= 54$ square units

$A = lw$

$= (9 \bullet 5)$

$= 45$ square units

Then, find the sum of all of the faces of the prism.

$SA = 12 + 12 + 54 + 45 + 45$

$= 168$ square units

The same procedure can be used to find the surface area of a **pyramid**. The areas of the faces are added to the area of the base to give the total surface area.

Solve each problem.

1. A prism has isosceles triangle bases with leg lengths of 5 inches, 5 inches, and 8 inches, and a height of 3 inches. The distance between the bases is 12 inches. Find the surface area. Show your work.

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2. A square pyramid has a base edge of 1 meter. The height of each triangular face is 1 meter. What is the pyramid's surface area? Show your work.

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