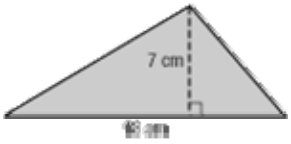
Lesson 11-2

Example 1 Find the Area of a Triangle
Find the area of the triangle at the right.

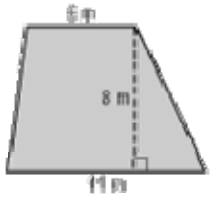


Estimate $A = \frac{1}{2}(20)(7) = 70 \text{ cm}^2$

$A = \frac{1}{2}bh$	Area of a triangle
$A = \frac{1}{2}(18)(7)$	Replace b with 18 and h with 7.
$A = 63$	Multiply.

The area of the triangle is 63 square centimeters.
This is close to the estimate.

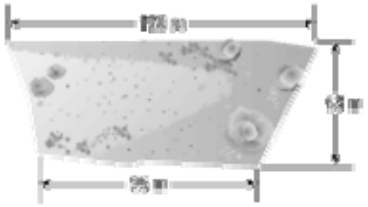
Example 2 Find the Area of a Trapezoid
Find the area of the trapezoid at the right.



The bases are 6 meters and 11 meters.
The height is 8 meters.

$A = \frac{1}{2}h(b_1 + b_2)$	Area of a trapezoid
$A = \frac{1}{2}(8)(6 + 11)$	Replace h with 8, b_1 with 6, and b_2 with 11.
$A = \frac{1}{2}(8)(17)$	Add 6 and 11.
$A = 68$	Multiply.

The area of the trapezoid is 68 square meters.



Example 3 Use a Formula to Estimate Area

LAND The shape of a large plot of land resembles a trapezoid. Estimate its area in square meters.

$A = \frac{1}{2}h(b_1 + b_2)$	Area of a trapezoid
$A = \frac{1}{2}(58)(95 + 120)$	Replace h with 58, b_1 with 95, and b_2 with 120.
$A = \frac{1}{2}(58)(215)$	Add 95 and 120.
$A = 6{,}235$	Multiply.

The area of the plot of land is about 6,235 square meters.