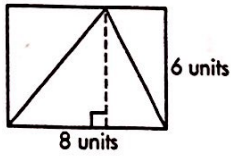


# Lesson 6.1 Calculating Area: Triangles

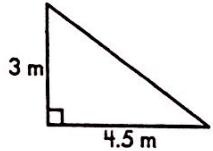
The area of a triangle is related to the area of a rectangle.



The dashed line indicates the height of the triangle.

rectangle:  $A = 8 \times 6 = 48$  sq. units

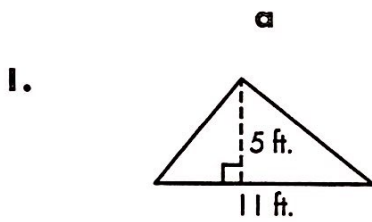
triangle:  $A = \frac{1}{2}(8)(6) = 24$  sq. units



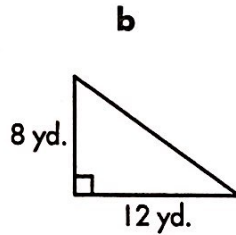
$A = \frac{1}{2}(4.5)(3) = 6\frac{3}{4}$  sq. m

Notice that in a right triangle the height is the length of one of the legs. This is not the case with acute and obtuse triangles.

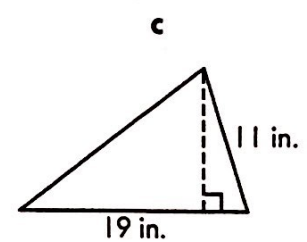
Find the area of each triangle below.



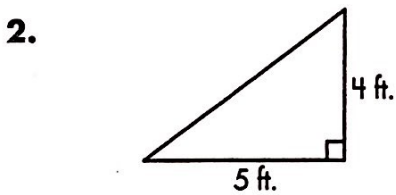
$A = \underline{\hspace{2cm}}$  sq. ft.



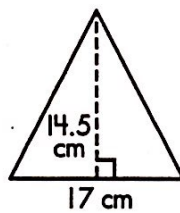
$A = \underline{\hspace{2cm}}$  sq. yd.



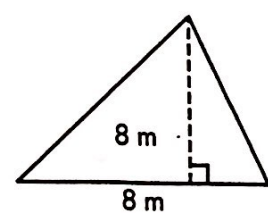
$A = \underline{\hspace{2cm}}$  sq. in.



$A = \underline{\hspace{2cm}}$  sq. ft.



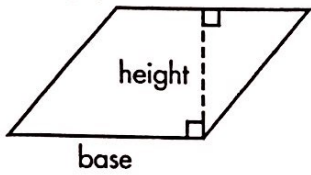
$A = \underline{\hspace{2cm}}$  sq. cm



$A = \underline{\hspace{2cm}}$  sq. m

## Lesson 6.2 Calculating Area: Quadrilaterals

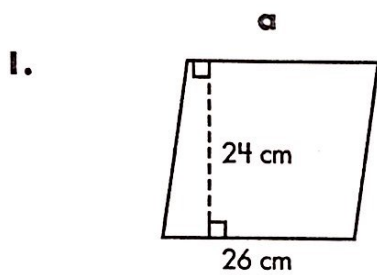
A parallelogram is a polygon with 2 sets of parallel sides. To find the **area of a parallelogram**, multiply the measure of its base by the measure of its height:  $A = b \times h$  or  $A = bh$ .



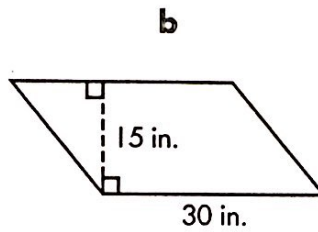
$b = 8$  in. and  $h = 7$  in. What is  $A$ ?

$$A = b \times h \quad A = 8 \times 7 = 56 \text{ in.}^2 \text{ or } 56 \text{ square inches.}$$

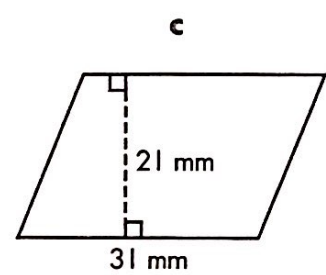
Find the area of each parallelogram.



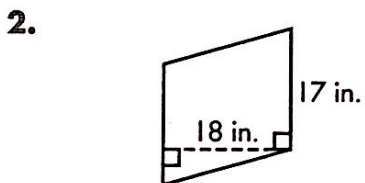
$$A = \underline{\hspace{2cm}} \text{ sq. cm}$$



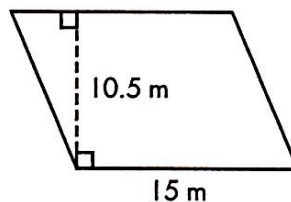
$$A = \underline{\hspace{2cm}} \text{ sq. in.}$$



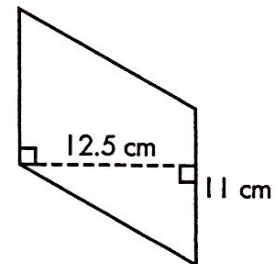
$$A = \underline{\hspace{2cm}} \text{ sq. mm}$$



$$A = \underline{\hspace{2cm}} \text{ sq. in.}$$



$$A = \underline{\hspace{2cm}} \text{ sq. m}$$



$$A = \underline{\hspace{2cm}} \text{ sq. cm}$$