

Chapter Preview

10-1 Areas of Parallelograms and Triangles
 10-2 Areas of Trapezoids, Rhombuses, and Kites
 10-3 Areas of Regular Polygons
 10-4 Perimeters and Areas of Similar Figures
 10-5 Trigonometry and Area
 10-6 Circles and Arcs
 10-7 Areas of Circles and Sectors
 10-8 Geometric Probability

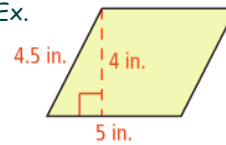
Lesson 10.1 Areas of Parallelograms & Triangles

Area of a Rectangle: $A = bh$

Area of a Parallelogram: $A = bh$

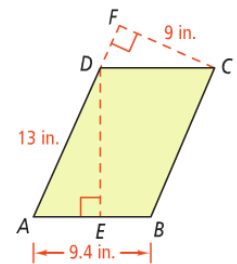
(think of it as a rectangle slanted--the area inside is the same)

Ex.



- 1 What is the area of a parallelogram with base length 12 m and height 9 m? (include your label)

Ex. Find DE



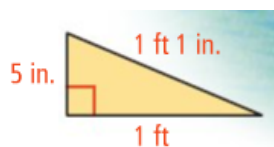
Area of a Triangle: $A = \frac{1}{2}bh$

*A base of triangle can be any of its sides. The corresponding height is the length of the altitude to the line containing that base.

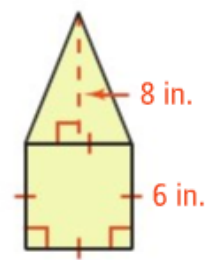
Ex. You want to make a triangular sail like the one at the right. How many square feet of material do you need?



2 What is the area of the triangle? (include your label)



Ex. What is the area of the figure below?



3 Suppose the base lengths of the square and triangle in the previous example are doubled to 12 in., but the height of the triangle and rectangle remains the same. How is the area of the figure affected?

