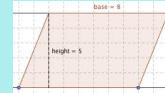
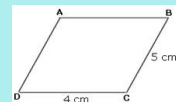


Objective - Find the area and perimeter of various quadrilaterals (including parallelograms, trapezoids, rhombi, and kites).

Area - the number of square units needed to cover a surface (always inside the figure)



Perimeter - the sum of the lengths of the sides of a polygon (the outside of the figure)



Area Formulas:

Parallelogram
 Square $A = bh$
 Rectangle

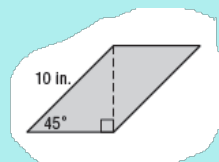
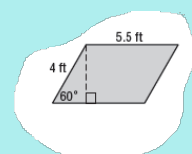
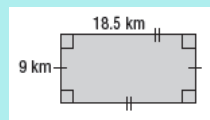
Trapezoid $A = \frac{1}{2}h(b_1 + b_2)$

Rhombus or kite $A = \frac{1}{2}d_1d_2$

Perimeter:
 Add up all the sides (not imaginary height lines)

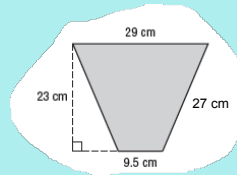
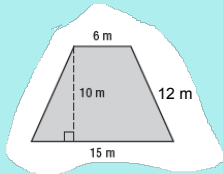
Parallelogram $A = bh$

Find the area and perimeter of each parallelogram.



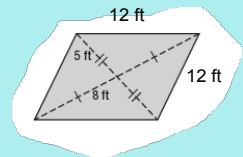
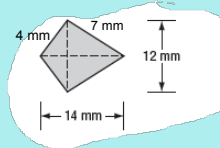
Trapezoid $A = \frac{1}{2}h(b_1 + b_2)$

Find the area and perimeter of each trapezoid.



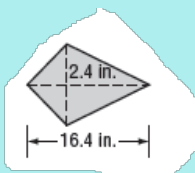
Rhombus or kite $A = \frac{1}{2}d_1d_2$

Find the area and perimeter of each rhombus or kite.



Try these with a partner

1. Find the area .



2. A trapezoid has base lengths of 19.5 and 24.5 centimeters with an area of 154 cm². What is the height of the trapezoid?