

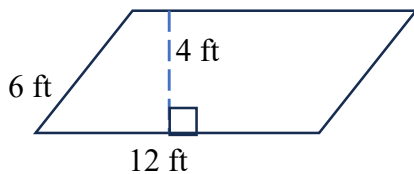
Quadrilateral Area Homework

Write your answers on notebook paper, not this sheet.

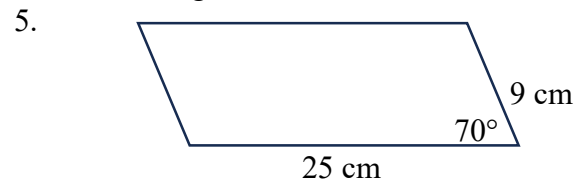
Area of rectangle = (base)(height)
 Area of parallelogram = (base)(height)
 Area of trapezoid = $\left(\frac{\text{base}_1 + \text{base}_2}{2}\right)$ (height)
 Area of kite or rhombus = $\frac{1}{2}$ (Diagonal₁)(Diagonal₂)

Calculate the area. Write the formula. Plug in the given values. Show your work. Include the units in your answers. Round answers to 2 decimal places.

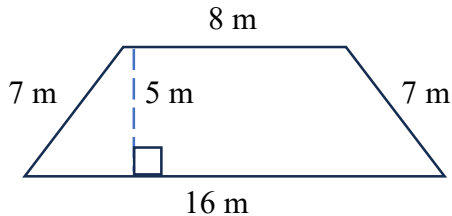
1. Parallelogram



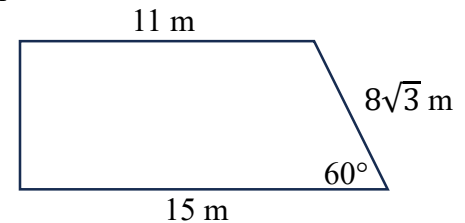
4. Parallelogram



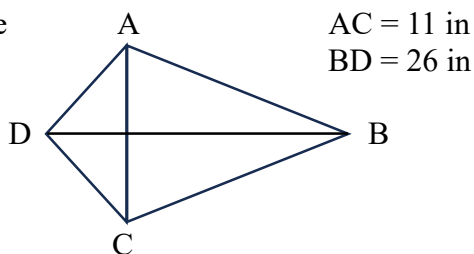
2. Trapezoid



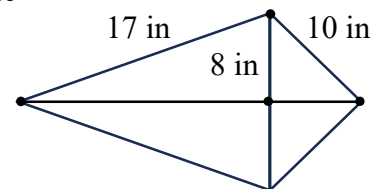
6. Trapezoid



3. Kite



7. Kite



8. A rectangle has an area of 144.5 square feet. Its length is twice as long as its width. What are the dimensions of the rectangle?
9. A square has a diagonal $15\sqrt{2}$ inches long. What is the area of the square? Hint: Draw a picture and mark the lengths and angles you know.