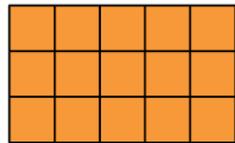# Activity 5 Assessment
Areas of Parallelograms and Triangles
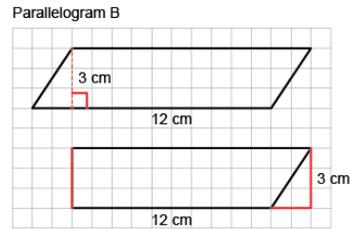
Measuring Area of Parallelograms and Triangles

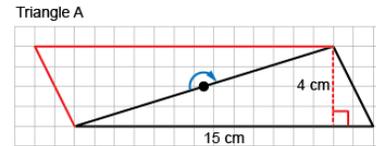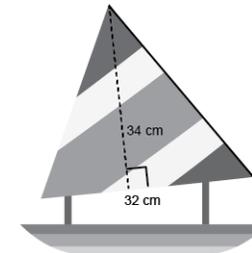|			
Determines the area of a rectangle. "A rectangle is an array of squares. To find the area, I multiply the number of rows by the number of columns or use the formula $A = b \times h$. This rectangle has area $5\ \text{cm} \times 3\ \text{cm} = 15\ \text{cm}^2$."	Partitions and rearranges a parallelogram to form a rectangle with the same base and height. Parallelogram B 3 cm 12 cm 3 cm 12 cm "I partitioned the parallelogram and moved the triangle to create a rectangle. I then found the area of the rectangle: $A = b \times h = 12\ \text{cm} \times 3\ \text{cm} = 36\ \text{cm}^2$. The area of the parallelogram is also $36\ \text{cm}^2$."	Doubles a triangle to create a parallelogram (area of triangle is one-half that of parallelogram). Triangle A 4 cm 15 cm "I rotated the triangle to make a parallelogram with the same base and height. The area of the triangle is one-half the area of the parallelogram. Area of parallelogram: $15\ \text{cm} \times 4\ \text{cm} = 60\ \text{cm}^2$ Area of triangle: $60\ \text{cm}^2 \div 2 = 30\ \text{cm}^2$ So, the formula for the area of a triangle is: $A = b \times h \div 2$."	Flexibly solves problems involving the areas of rectangles, parallelograms, and triangles. 34 cm 32 cm What is the area of the sail on the toy boat? "I doubled the triangular sail to make a parallelogram with the same base and height. I found the area of the parallelogram: $34\ \text{cm} \times 32\ \text{cm} = 1088\ \text{cm}^2$, then divided the area in half to find the area of the triangle: $1088\ \text{cm}^2 \div 2 = 544\ \text{cm}^2$."

Observations/Documentation