

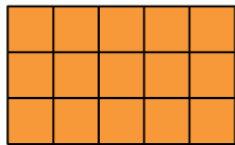
Activity 5 Assessment

Areas of Parallelograms and Triangles

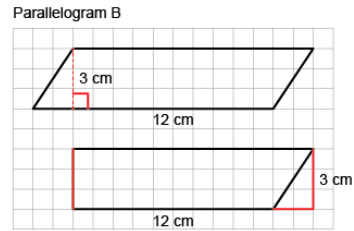
Measuring Area of Parallelograms and Triangles

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 $5 \text{ cm} \times 3 \text{ cm} = 15 \text{ cm}^2$.”

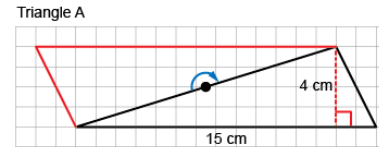


Partitions and rearranges a parallelogram to form a rectangle with the same base and height.



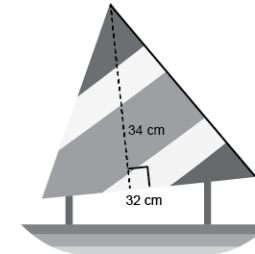
“I partitioned the parallelogram and moved the triangle to create a rectangle. I then found the area of the rectangle: $A = b \times h = 12 \text{ cm} \times 3 \text{ cm} = 36 \text{ cm}^2$. The area of the parallelogram is also 36 cm^2 .”

Doubles a triangle to create a parallelogram (area of triangle is one-half that of parallelogram).



“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.



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