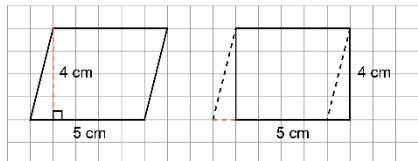# Lesson 5 Assessment
Determining the Area of Parallelograms

Determining the Area of Parallelograms

Explains the relationships between the area of a rectangle and a parallelogram	Determines the area of a parallelogram using the area formula.	Uses parallelogram area formula to determine a missing measure	Flexibly solves problems involving the area of parallelograms.

Explains the relationships between the area of a rectangle and a parallelogram
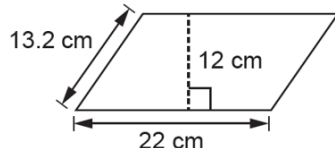

I cut a triangle from end of the parallelogram and moved it to the other end.
The area of the parallelogram was rearranged to form a rectangle, and no area was lost. So, the area of a parallelogram is the same as the area of a rectangle, 20 cm^2.
$A = b \times h$

Determines the area of a parallelogram using the area formula.

$A = bh$

$A = 22 \times 12$

$A = 264$

The are of the parallelogram is 264 cm^2.

Uses parallelogram area formula to determine a missing measure

What is the base of a parallelogram with area of 36 cm^2 and height of 6 cm?
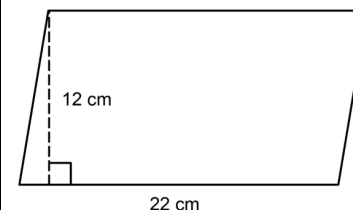
$A = bh$

$36 = b \times 6$

$\frac{36}{6} = b$

$b = 6$

The base of the parallelogram is 6 cm.

Flexibly solves problems involving the area of parallelograms.

How many of the smaller parallelograms would fit in the larger parallelogram?

Area of smaller parallelogram:
$A = 2 \text{ cm} \times 3 \text{ cm} = 6 \text{ cm}^2$
Area of larger parallelogram:
$A = 22 \text{ cm} \times 12 \text{ cm} = 264 \text{ cm}^2$
$264 \div 6 = 44$; 44 smaller parallelograms would fit in the larger parallelogram.

Observations/Documentation