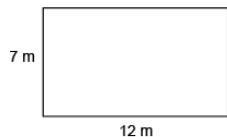


Activity 2 Assessment

Determining Area

Determining Area

Understands area as an attribute of 2-D shapes that can be measured and compared.



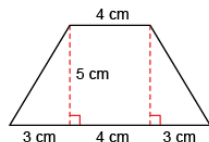
$$A = b \times h$$

$$A = 12 \text{ m} \times 7 \text{ m}$$

$$A = 84 \text{ m}^2$$

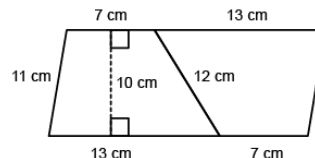
"I determined the area of the rectangle by multiplying the length of the base by the height."

Determines area by decomposing shapes into smaller shapes, then adding their areas.



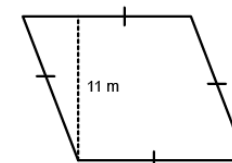
"I decomposed the trapezoid into a rectangle and 2 triangles.
 Area of rectangle:
 $4 \text{ cm} \times 5 \text{ cm} = 20 \text{ cm}^2$
 Area of each triangle:
 $3 \text{ cm} \times 5 \text{ cm} \div 2 = 7.5 \text{ cm}^2$.
 Area of trapezoid:
 $20 \text{ cm}^2 + 7.5 \text{ cm}^2 + 7.5 \text{ cm}^2 = 35 \text{ cm}^2$."

Determines area by composing and decomposing shapes into shapes with known area formulas.



"I doubled the trapezoid to make a parallelogram.
 I know the area of the trapezoid is one-half the area of the parallelogram:
 $(13 + 7) \times 10 \div 2 = 20 \times 10 \div 2 = 100$. The area of the trapezoid is 100 cm^2 ."

Flexibly composes/decomposes composite polygons and irregular shapes to solve problems



A garden is shaped like a rhombus. The perimeter of the garden is 60 m. The height of the rhombus is 11 m. What is the area of the garden?

"Side length of rhombus:
 $60 \text{ m} \div 4 = 15 \text{ m}$. A rhombus is a parallelogram with all sides equal. So, to find the area of the rhombus, I use this formula:
 $A = b \times h$; $15 \text{ m} \times 11 \text{ m} = 165 \text{ m}^2$.
 The area of the garden is 165 m^2 ."

Observations/Documentation