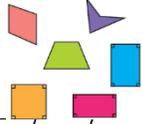
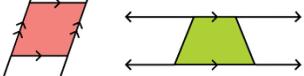
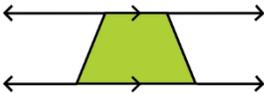
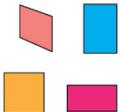
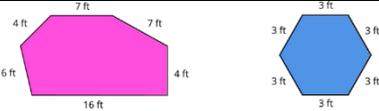


3rd Grade Mission 7 Notes

Polygon		Closed shapes that has all straight sides
Angles		Two sides that share an endpoint
Right Angle		Point where two sides meet and forms a square corner (90°)
Quadrilateral		Polygon with four straight sides and four angles
Parallel lines (sides)		Lines that never touch even if they keep going
Trapezoid		Quadrilateral that has at least one set of parallel lines
Parallelogram		Quadrilateral that has two sets of parallel lines
Rectangle		Quadrilateral with four right angles (also a parallelogram) Have opposite sides that are parallel and equal
Square		Quadrilateral with four sides and right angles , all sides are equal and 2 sets of parallel lines (also a parallelogram)
Hexagon		Polygon with 6 sides
Regular polygon		Shapes with all equal sides and equal angles
Triangle		Polygon with 3 sides
Pentagon		Polygon with 5 sides

A shape must have the same number of sides and angles.

Area- the space a flat shape takes up

Area (squared units) = length x width

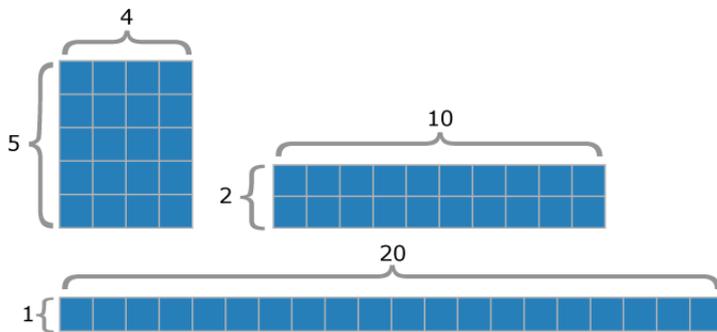
**See Mission 4 notes for more detailed information on Area. **

When finding the area of 2 polygons put together:

1st - find the area of the first polygon ($5 \times 2 = 10$)

2nd - find the area of the second polygon ($4 \times 6 = 24$)

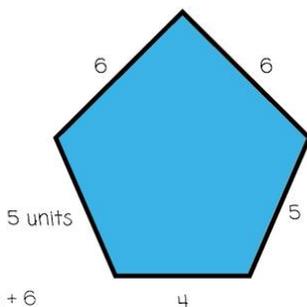
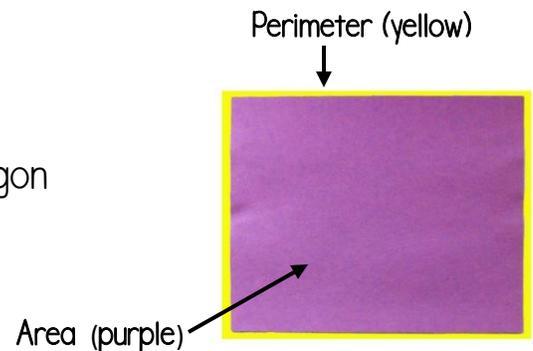
3rd - add the two areas together ($10 + 24 = 34$)



Same area, but different side lengths

Perimeter- the outside edges (boundaries) of a polygon (shape).

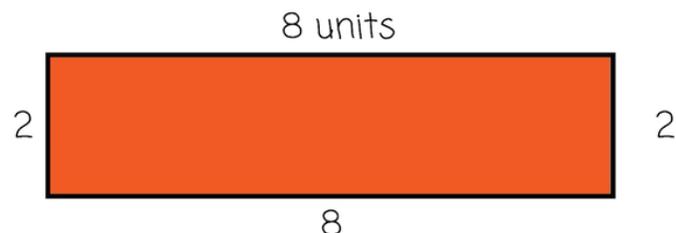
Perimeter= length + width + length + width



$$\begin{aligned} &5 + 5 + 6 + 4 + 6 \\ &= 10 + 10 + 6 \\ &= 20 + 6 \\ &= 26 \end{aligned}$$

The perimeter is 26 units.

Example 1



$$\begin{aligned} &8 + 8 + 2 + 2 \\ &= 16 + 4 \\ &= 20 \end{aligned}$$

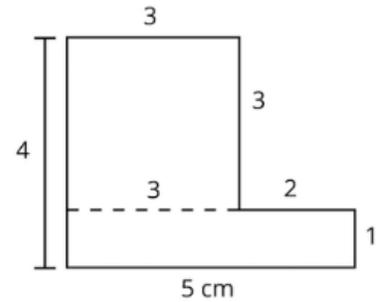
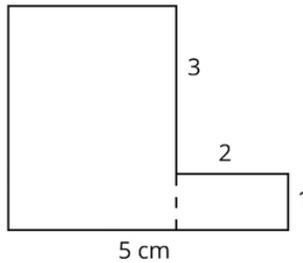
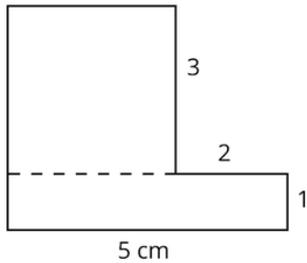
The perimeter is 20 units.

Example 2

A circle does have a perimeter.

To find the missing side lengths of a shape, look at the shape's attributes.

When trying to solve the perimeter with missing measurements, create two shapes by drawing a dotted line. Then, use what you know about the shapes to fill in the missing measurements. Remember when finding the perimeter, you only need to add the outer sides.



$$3 \text{ cm} + 3 \text{ cm} + 2 \text{ cm} + 1 \text{ cm} + 5 \text{ cm} + 4 \text{ cm} = 18 \text{ cm}$$

The perimeter is 18 cm.

For word problems, be sure to use the **RDW** strategy.

Read the problem and underline what's important.

Draw a model to represent the problem using a letter to represent the unknown. Solve for the unknown answer.

Write your answer in a complete sentence.