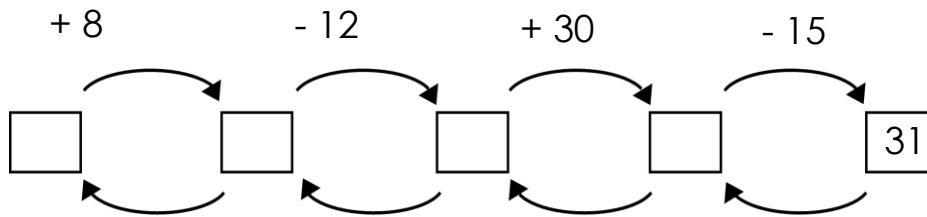


Commutative Property of Addition. Perimeter. Set

1 "I think of a number" game with Little Joe.

LJ thought of a number. He added 8, subtracted 12, added 30, subtracted 15, and got 31. What was the number LJ think of?



2 In your notebook, solve the equations and write you solutions similarly to the example. Copy your answers here. Make drawings if needed.

$$x + 23 = 32$$

$$x =$$

$$27 - y = 19$$

$$y =$$

$$z - 15 = 16$$

$$z =$$

Commutative Property of Addition.

Look at the equality: $20 - 10 + 5 =$. Does the order of operation matter? What will we get if will do $20 - 10$ first and then add 5 to the result? What will we get if we will do $10 + 5$ first and then will subtract the result from 20? Are results the same? Which one is correct? Why?

Look at the equality: $20 + 10 + 5 =$. Does the order of operation matter? What will we get if will do $20 + 10$ first and then add 5 to the result? What will we get if we will do $10 + 5$ first and then will add the result to 20? Are results the same?

The Commutative property of addition states that **for addition** order of operation **does not matter**.

$$8 + 5 = 5 + 8$$

$$6 + 10 + 1 = 10 + 1 + 6$$

$$a + b = b + a$$

3

Can this commutative property be useful?

$$10 + 20 + 30 + 40 + 50 + 60 + 70 + 80 + 90 =$$

4

Calculate using commutative property of addition:

5

$$6 + 17 + 4 =$$

$$17 + 7 + 13 + 3 =$$

$$3 + 55 + 17 + 5 =$$

$$11 + 12 + 19 + 18 =$$

$$13 + 22 + 7 + 8 =$$

$$28 + 19 + 37 + 3 + 1 + 2 =$$

Mark the order of operations and evaluate the expressions:

① ②

$$10 - 7 + 1 =$$

$$18 + 5 + 2 = \underline{\quad}$$

$$14 + 1 + 10 - 1 = \underline{\quad}$$

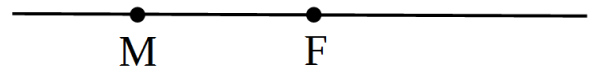
$$23 + 9 + 7 =$$

$$13 - 3 + 9 = \underline{\quad}$$

$$20 + 5 + 1 - 5 = \underline{\quad}$$

6

a) A frog is faster than a mouse. A dragonfly is faster than the frog. Which one is the fastest?



b) A cup is smaller than a jar. A bucket is larger than the jar. Which one is the largest?



c) LJ is shorter than JTM. JTM is shorter than PE. FT is taller than LJ but shorter than JTM.

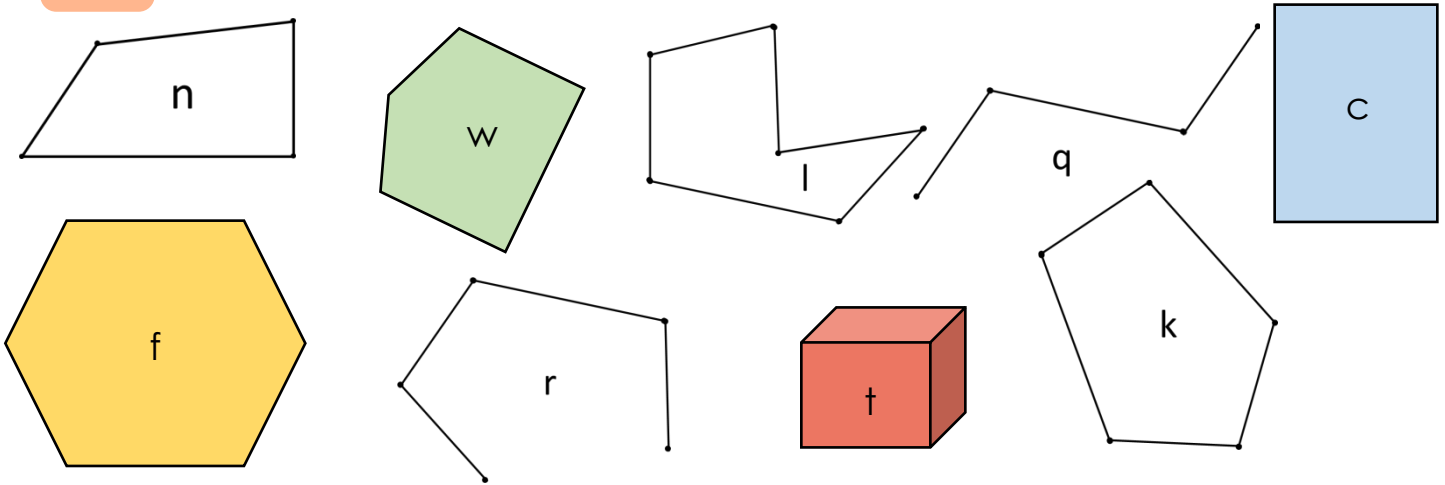
Who is the tallest?



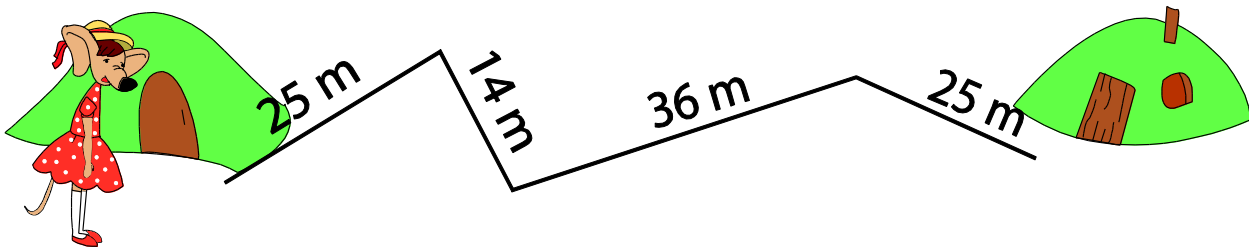
Polygon. Perimeter

A polygon is a plane shape formed by a closed polygonal chain.

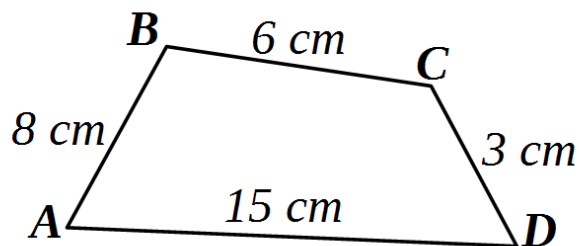
- 7 Look at the drawing. How many polygons we have on the picture?



- 8 Find a length of the path from one house to another.



- 9 Find the total length of the sides of a polygon ABCD.



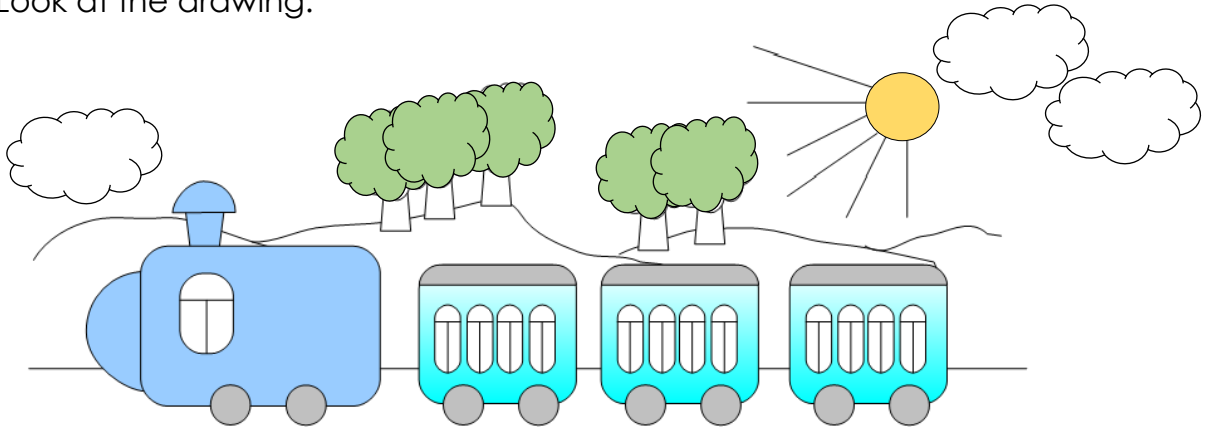
Perimeter is the distance around a two-dimensional shape.

Set. Elements of the set.

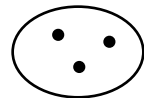
A **set** is a collection of objects that have something in common. The objects in the set are called the elements.

10

Look at the drawing.

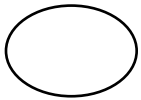


Why are there 3 dots in the rectangle?

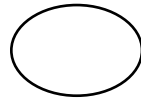


- set of cars

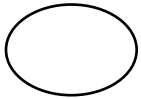
Put the appropriate number of dots in the rest of the sets.



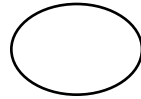
- Set of windows in a car



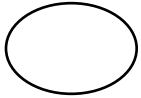
- Set of wheels



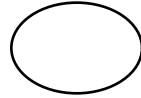
- Set of trees



- Set of clouds



- Set of locomotives



- Set of stars

11

Place the ID numbers of the objects on the drawings inside or outside of the diagram for the set of polygons.

