

Study the following.

dimension (duh-**men**-shuhn) – a measurement taken between two specific points on a 2-D or 3-D figure. Dimensions are needed to describe a 2-D figure or 3-D solid. These dimensions are then used to calculate amounts like area. (The dimensions of the rectangle were the numbers I needed to calculate area.) (I measured the dimensions of the cylinder.)

side (**side**) – the up and down distance of a figure (square).

width (**width**) – the short part of a rectangle.

length (**length**) – the long part of a rectangle.

height (**hite**) – how tall a figure is.

base (**bayss**) – the bottom distance of a figure.

radius (**ray-dee-uhss**) – the distance from the center of a circle, to the circle.

These are all dimensions. See the following for more detail.

Say each word out loud and write it in the blank.

- dimension _____
- side _____
- width _____
- length _____
- height _____
- base _____
- radius _____

Write the definition in your own words.

dimension

side

width

length

height

base

radius

Write two sentences using each word.

dimension

1.

2.

Matching.

dimension

a measurement taken between two specific points on a 2-D or 3-D figure.

side

a dimension

width

a dimension

length

a dimension

height

a dimension

base

a dimension

radius

a dimension

Study the following.

The first initial for each dimension is used in labeling drawings of plane figures. These initials are also used in calculations.

side = s

width = w

length = l

height = h

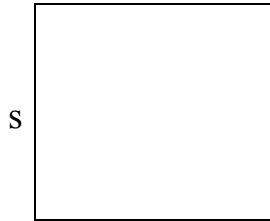
base = b

radius = r

Study the following.

The following diagrams show how to label different figures with their dimensions.

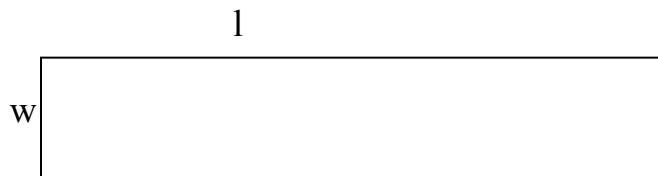
Square



$s = \text{side}$

All the sides of a square are the same, so only one has to be labeled.

Rectangle

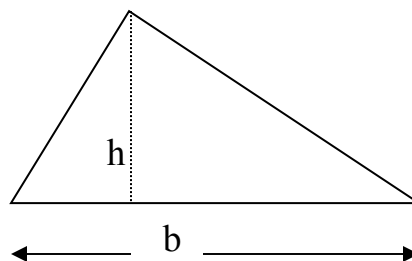


$l = \text{length}$

$w = \text{width}$

For rectangles, usually the length is the longer side and the width the shorter side.

Triangle

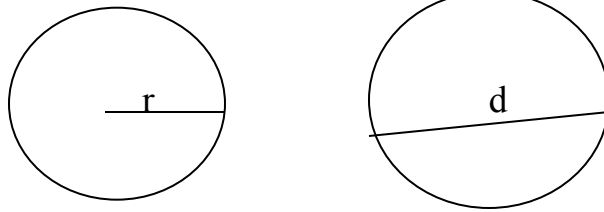


$h = \text{height}$

$b = \text{base}$

For triangles the height goes from the base straight up to the highest point. The base is the full length across the bottom. The arrows help make it clear which length you are referring to.

Circle

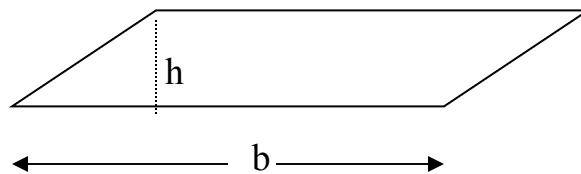


r = radius

d = diameter

If you are given the diameter, divide it in half to get the radius.

Parallelogram

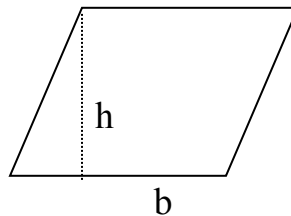


h = height

b = base

The height goes straight from the base to the top.

Rhombus

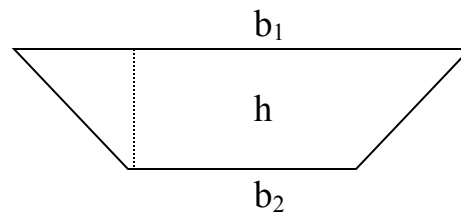


h = height

b = base

the labeling for a rhombus is the same as for a parallelogram.

Trapezoid



h = height

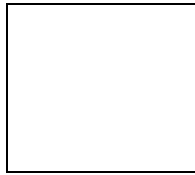
b_1 = base one

b_2 = base two

Either base can be called base one or base two.

Label the following with their dimensions.

1. square



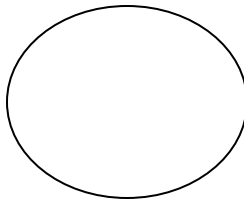
2. rectangle



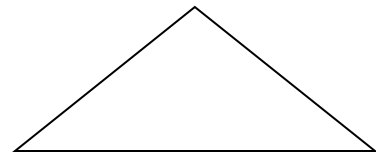
3. parallelogram



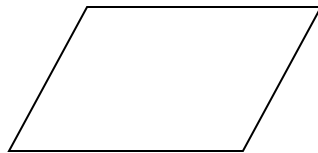
4. circle



5. triangle



6. rhombus



7. trapezoid

