AREA OF A TRIANGLE AND A CIRCLE

What is the area of a triangle and circle?

Area is the amount of surface a shape covers.

Area is measured in square units, units², whether the units are inches, feet, meters or centimeters.

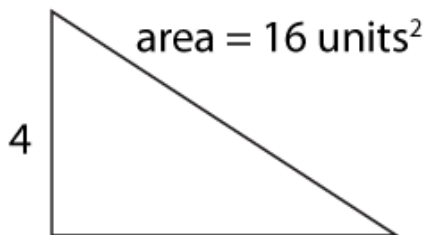The **area formula for a triangle is: A = 1/2 · b · h**, where b is the base and h is the height.

The **area formula for a circle is: A = π · r²,** where π is usually 3.14 and r is the radius of the circle.

How to use the area of a triangle and circle:

To find the   h

- Fill in   and
  heig

- If th   given, the
  miss   This time
  the area will be filled in as well as either the base or the height, depending on what is given. By performing the operations, the result will be the missing side.

Example:

$$A = 1/2 \cdot b \cdot h$$
$$16 = 1/2 \cdot b \cdot 4$$
$$16 = 2 \cdot b$$
$$8 = b$$

To find the **area of a circle**, use the formula $A = π \cdot r^2$

- Fill in for the radius of the circle. Then square the radius and multiply it by π, or 3.14, to find the area.

- The radius of the circle is half of the diameter, so if the diameter of a circle is given, simply divide it in half to find the radius.

- If given the area of a circle, the radius or diameter can be found by using the same formula. This time the area will be filled in and since π is 3.14, by performing the operations, the result will be the radius. If the diameter is needed, simply double the radius.

Example:

$$A = \Pi \cdot r^2$$

$$\frac{78.5}{4} = \frac{3.14 \cdot r^2}{4}$$

a

Try this!

1. **Find the area of the triangle:**

    base = 4, height = 12

    base = 10, height = 2

2. **Find the missing side of the triangle:**

    area = 64 units², base = 4

    area

3. **Find t**

    radius = 10

    diameter = 14

4. **Find the radius:**

    area = 28.26

5. **Find the diameter:**

    area = 200.96