KINDS OF TRIANGLES

SCALENE TRIANGLE
- no two sides are equal
- no two angles are equal

ISOSCELES TRIANGLE
- two sides (legs) are equal
- third side is the base
- two angles (base angles) are equal
- third angle is the vertex

EQUILATERAL TRIANGLE
- all three sides are equal
- all three angles are equal
- each angle = 60°

ACUTE TRIANGLE
- all angles are acute (less than 90°)

OBTUSE TRIANGLE
- one angle is obtuse
- (greater than 90°, but less than 180°)

RIGHT TRIANGLE
- one angle is a right angle (equals 90°)
- side opposite the right angle is the hypotenuse
- other two sides are the legs

PYTHAGOREAN THEOREM IS TRUE FOR ALL RIGHT TRIANGLES

\[ c^2 = a^2 + b^2 \]
1. The measure of the vertex angle of an isosceles triangle is 50 degrees. Find the measure in degrees of one of the base angles of the triangle.

2. The measure of each base angle of an isosceles triangle is 20 degrees. Find the number of degrees in the measure of the vertex angle.

3. Two angles of a right triangle are congruent. What is the number of degrees in the measure of each of these angles?

4. In an equilateral triangle, what is the degree measure of any one of its exterior angles?

5. The measure of the vertex angle of an isosceles triangle is 70 degrees. Find the measure of a base angle of the triangle.

6. Triangle ABC is a right triangle with a right angle at C. If exterior angle ABD = 130°, how many degrees are there in angle A?