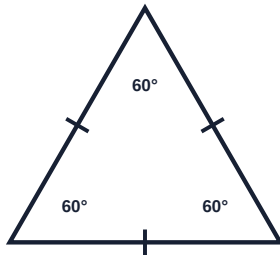


Triangle facts

Triangle foundations

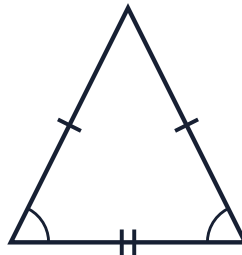
Every triangle has three straight sides and three interior angles. The interior angles always add to 180° .

Equilateral



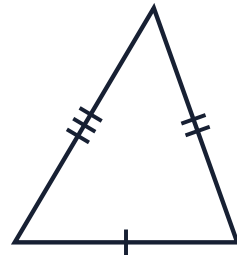
3 equal sides · 60° , 60° , 60°

Isosceles



At least 2 equal sides · equal base angles

Scalene



No equal sides or angles

Classify by side length

- Matching tick counts mark equal lengths. Different tick counts in these examples distinguish unequal lengths.

Equilateral

- Three equal sides and three equal angles. Each angle is 60° .

Isosceles

- At least two equal sides. The angles opposite those equal sides are equal.

Scalene

- No equal sides and no equal angles.

Inclusive definition

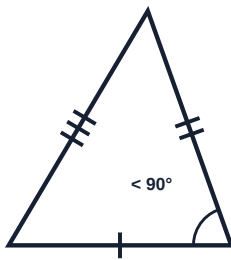
- An equilateral triangle is also isosceles because it has at least two equal sides. In classification practice, use Equilateral as the specific answer label.

Triangle facts

Classify by angle size

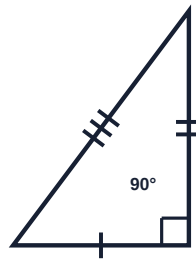
Look at the largest interior angle. A triangle is acute, right or obtuse.

Acute



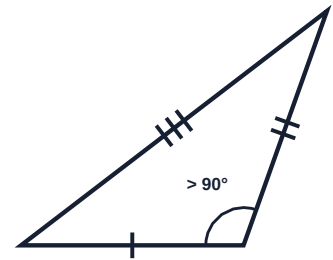
All angles $< 90^\circ$

Right



One angle $= 90^\circ$

Obtuse



One angle $> 90^\circ$

Acute

- All three interior angles are less than 90° .

Right

- Exactly one interior angle is 90° .

Obtuse

- Exactly one interior angle is greater than 90° .

Combine angle and side facts

- Acute scalene: all angles are less than 90° ; no sides are equal.
- Acute isosceles: all angles are less than 90° ; at least two sides are equal.
- Right scalene: one angle is 90° ; no sides are equal.
- Right isosceles: two sides are equal; the angles are 90° , 45° and 45° .
- Obtuse scalene: one angle is greater than 90° ; no sides are equal.
- Obtuse isosceles: one angle is greater than 90° ; at least two sides are equal.

Remember

- An equilateral triangle has three 60° angles, so it belongs to the acute and isosceles groups too. Use Equilateral as its specific answer label in classification practice.