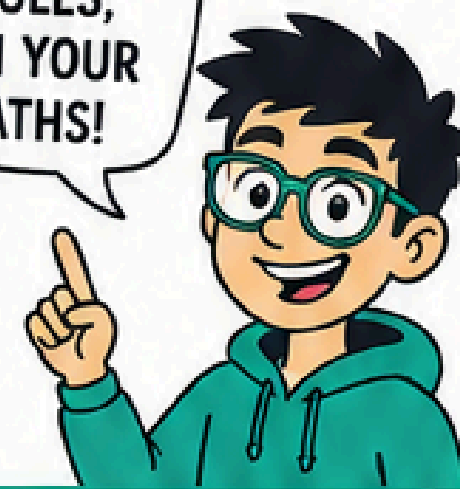


ANGLE RULES

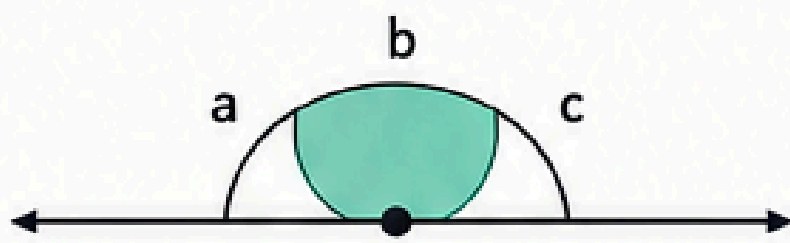
EVERY RULE YOU NEED TO KNOW!

KNOW YOUR ANGLES, OWN YOUR MATHS!



1. ANGLES ON A STRAIGHT LINE

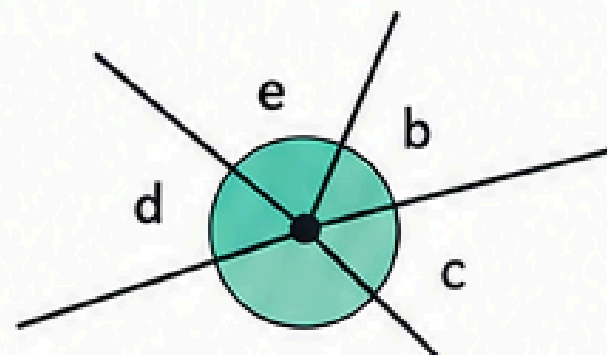
Angles on a straight line add up to 180° .



$$a + b + c = 180^\circ$$

2. ANGLES AROUND A POINT

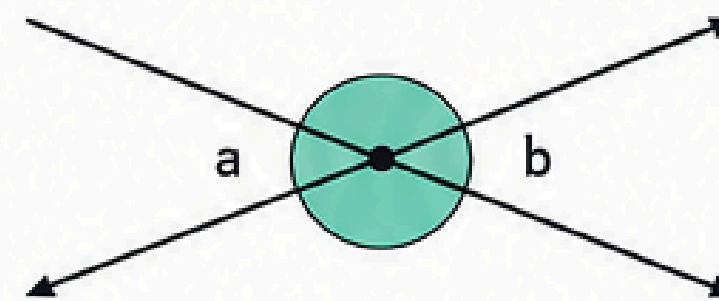
Angles around a point add up to 360° .



$$a + b + c + d + e = 360^\circ$$

3. VERTICALLY OPPOSITE ANGLES

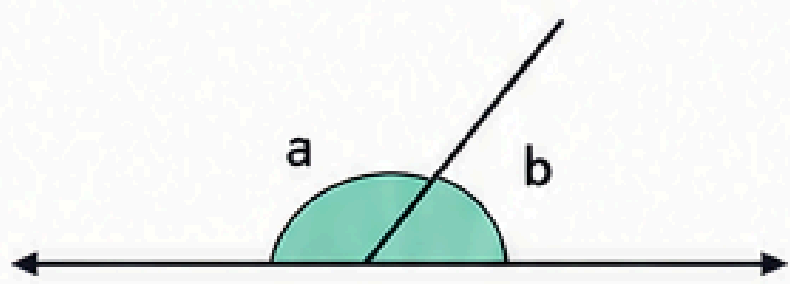
Vertically opposite angles are equal.



$$a = b$$

4. ADJACENT ANGLES

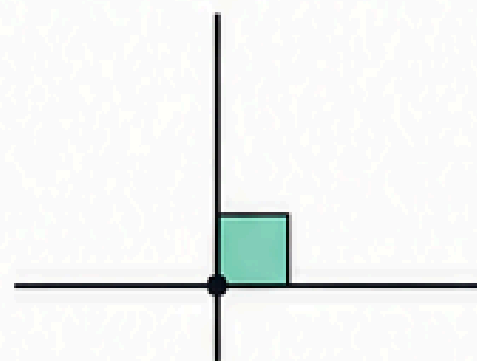
Adjacent angles share a common arm and add up to 180° on a straight line.



$$a + b = 180^\circ$$

5. PERPENDICULAR LINES

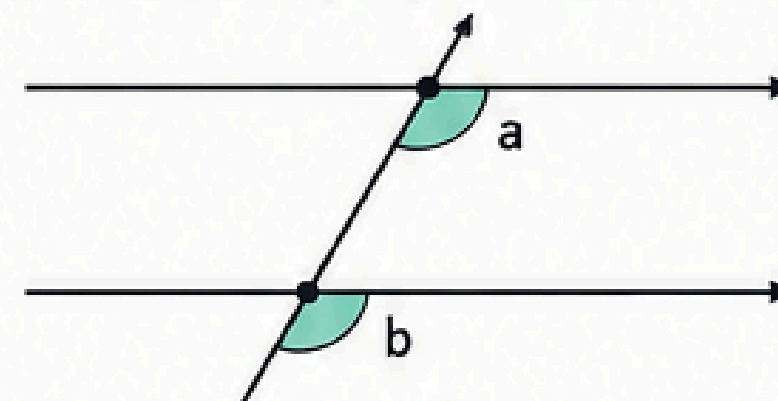
Perpendicular lines meet at a right angle.



$$\text{Each angle} = 90^\circ$$

6. PARALLEL LINES – CORRESPONDING ANGLES

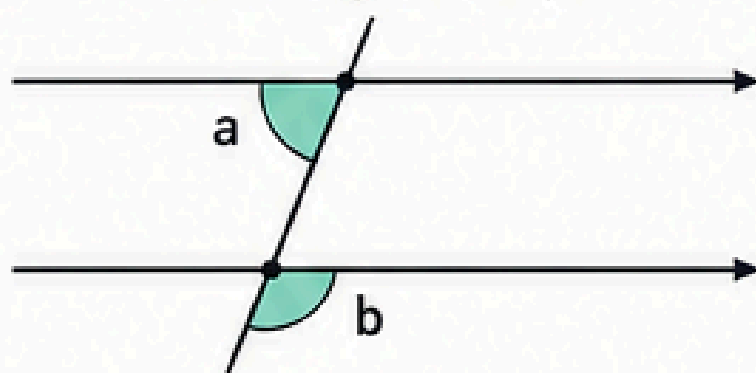
Corresponding angles are equal.



$$a = b$$

7. PARALLEL LINES – ALTERNATE ANGLES

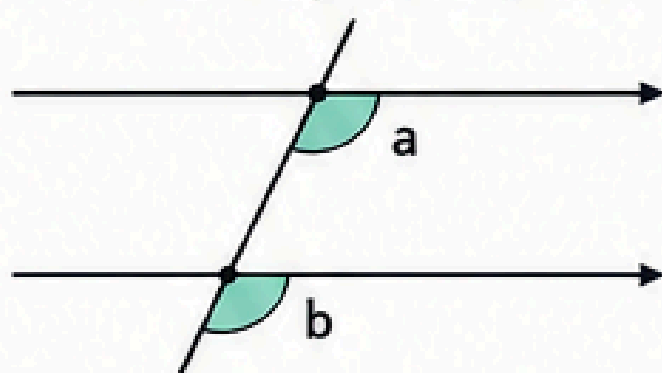
Alternate angles are equal.



$$a = b$$

8. PARALLEL LINES – CO-INTERIOR (SAME SIDE) ANGLES

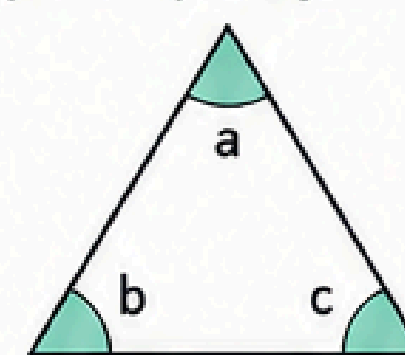
Co-interior angles add up to 180° .



$$a + b = 180^\circ$$

9. ANGLES IN A TRIANGLE

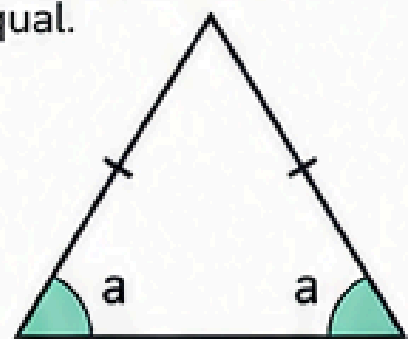
The angles in any triangle add up to 180° .



$$a + b + c = 180^\circ$$

10. ISOSCELES TRIANGLE

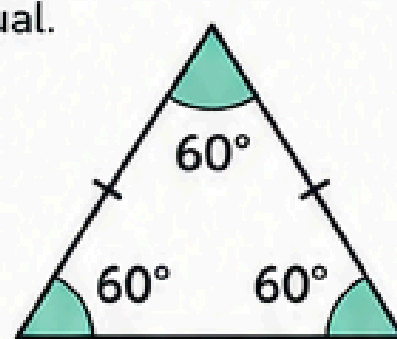
The base angles of an isosceles triangle are equal.



Base angles are equal

11. EQUILATERAL TRIANGLE

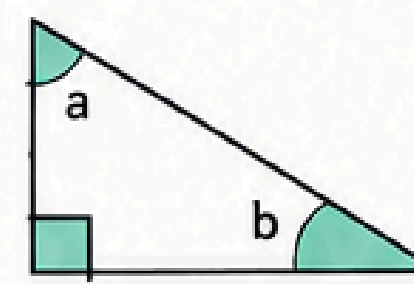
All angles in an equilateral triangle are equal.



Each angle = 60°

12. RIGHT-ANGLED TRIANGLE

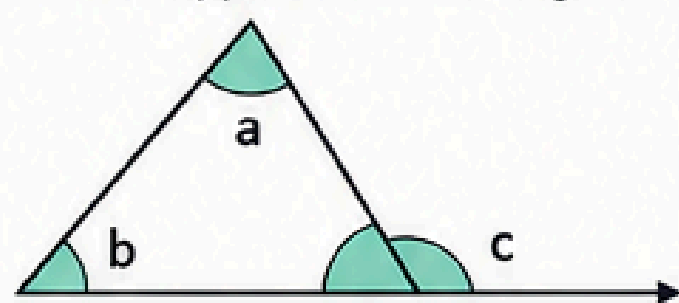
A right-angled triangle has one angle of 90° . The other two angles add up to 90° .



$$a + b = 90^\circ$$

13. EXTERIOR ANGLE OF A TRIANGLE

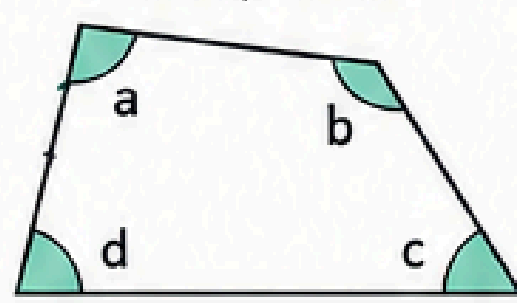
An exterior angle of a triangle is equal to the sum of the two opposite interior angles.



$$c = a + b$$

14. ANGLES IN A QUADRILATERAL

The interior angles of any quadrilateral add up to 360° .



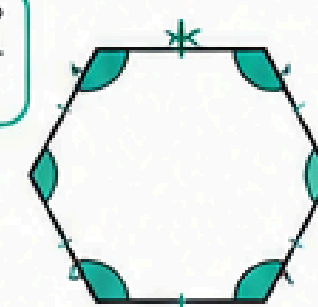
$$a + b + c + d = 360^\circ$$

15. REGULAR POLYGON

Each interior angle of a regular polygon with n sides is:

$$\text{Interior angle} = \frac{(n-2) \times 180^\circ}{n}$$

$$\text{Each exterior angle} = \frac{360^\circ}{n}$$



QUICK TIPS!

- ✓ Look for straight lines, right angles or parallel lines.
- ✓ Use known rules to find missing angles.
- ✓ Label your angles clearly.
- ✓ Always check your answer!

REMEMBER!

- * Angles are measured in degrees ($^\circ$).
- * A full turn is 360° .
- * These rules work for all shapes and diagrams!

PRACTICE MAKES PERFECT!

