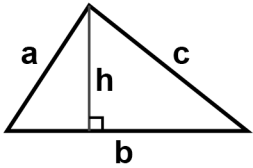


Area and Perimeter Formulas

Triangles - Common

A polygon with three angles and three sides.

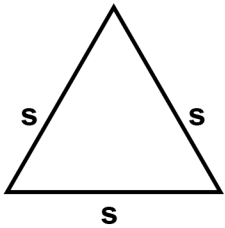


$$\text{Area} = \frac{1}{2} \text{ base} \times \text{height} = \frac{1}{2} bh$$

$$\text{Perimeter} = a + b + c$$

Equilateral Triangles

A Triangle with all three sides of equal length.

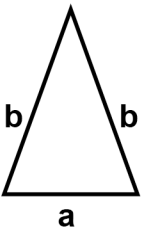


$$\text{Area} = \frac{\sqrt{3}}{4} \times (\text{side})^2 = \frac{\sqrt{3}}{4} s^2$$

$$\text{Perimeter} = 3 \times \text{sides} = 3s$$

Isosceles Triangles

A Triangle with two sides of equal length.

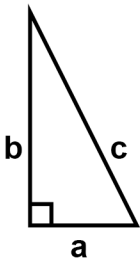


$$\text{Area} = \frac{a}{4} \sqrt{4b^2 - a^2}$$

$$\text{Perimeter} = a + 2b$$

Right Triangles

A Triangle with one right angle.



$$\text{Area} = \frac{ba}{2}$$

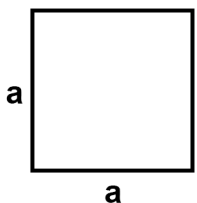
$$\text{Perimeter} = a + b + c$$

Square

A Square is a quadrilateral with four equal sides and angles at 90° .

$$\text{Area} = a^2$$

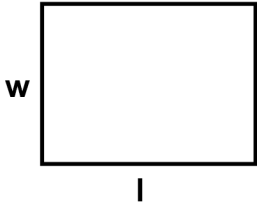
$$\text{Perimeter} = 4a$$



Area and Perimeter Formulas

Rectangle

A Rectangle is a quadrilateral with four equal angles at 90° .

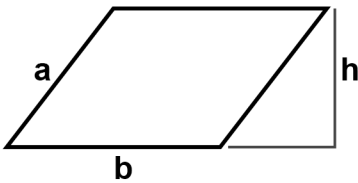


$$\text{Area} = lw$$

$$\text{Perimeter} = 2(w + l)$$

Parallelogram

A Parallelogram is a quadrilateral with opposite sides parallel.

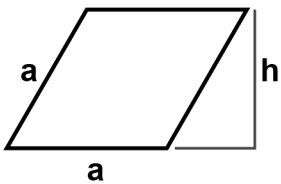


$$\text{Area} = bh$$

$$\text{Perimeter} = 2(a + b)$$

Rhombus

A Rhombus is a Parallelogram with all sides equal.

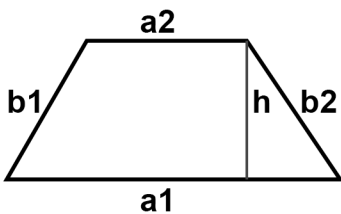


$$\text{Area} = ah$$

$$\text{Perimeter} = 4a$$

Trapezoid

A Trapezoid is a Quadrilateral with at least one pair of parallel sides.

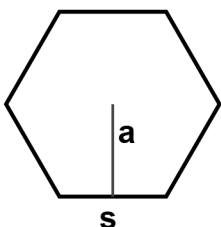


$$\text{Area} = \frac{a1 + a2}{2} h$$

$$\text{Perimeter} = a1 + a2 + b1 + b2$$

Regular n-gon

A Regular Polygon is a polygon for which n sides and angles are equal.



$$\text{Area} = \frac{1}{2} (a n s)$$

$$\text{Perimeter} = n s$$