Formula Quiz

Foundation Tier

Area of a Rectangle

b x h

Area of a triangle

½ x base x height

Area of a parallelogram

b x h

Area of a trapezium

$$\tfrac{1}{2}(a + b) \times h$$

Area of a circle

$$\pi \times r^2$$

Circumference of a circle

π x d

or

2 x π x r

Area of a sector

$$\frac{\theta}{360} \times \pi r^2$$

Arc Length of a sector

$$\frac{\theta}{360} \times \pi d$$

Sum of Interior Angles of a polygon
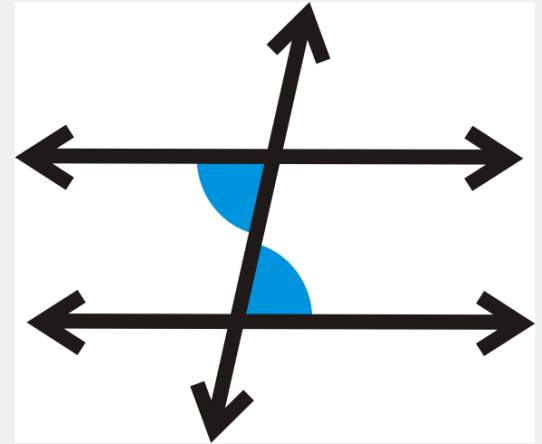
(n – 2) x 180

Exterior angle of a regular polygon
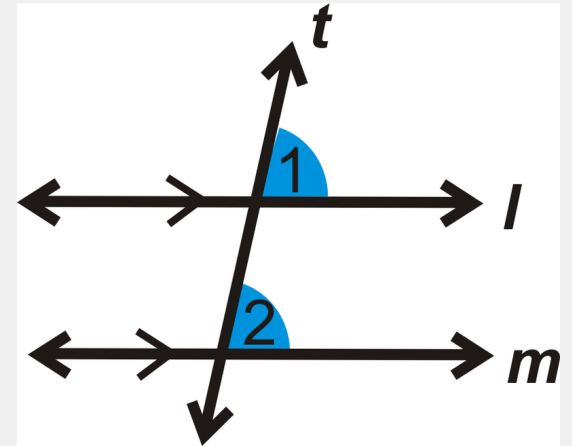
$$\frac{360}{n}$$

Interior angle of a regular polygon

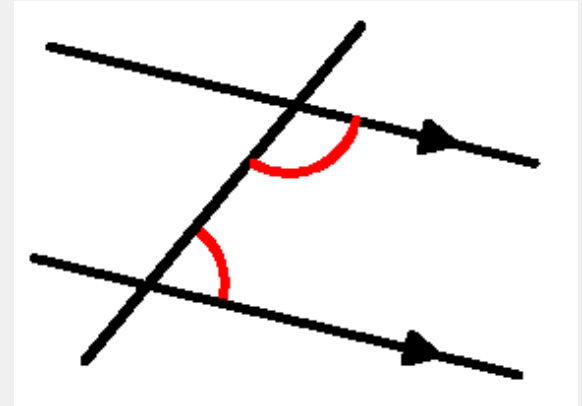$$\frac{(n-2) \times 180}{n}$$

What rule is this?

Alternate angles are equal

What rule is this?
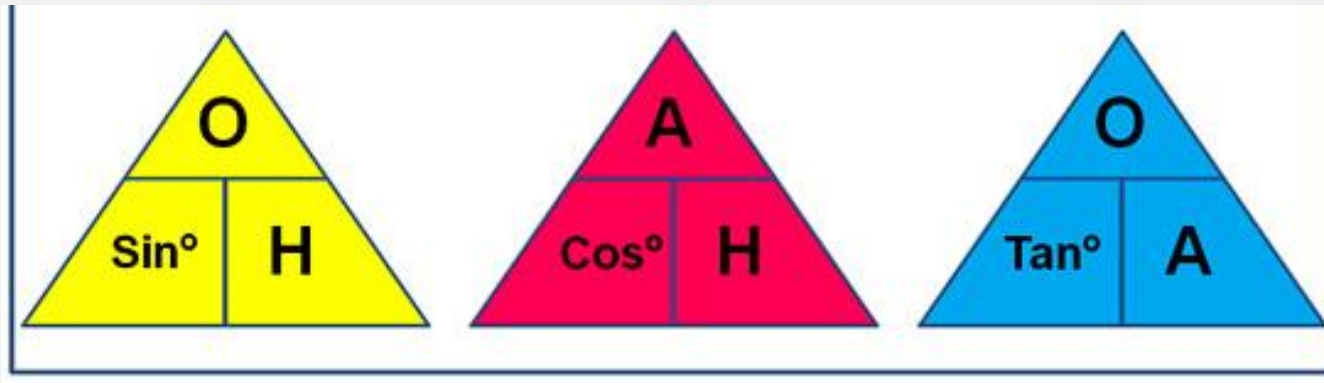

Corresponding angles are equal

What rule is this?

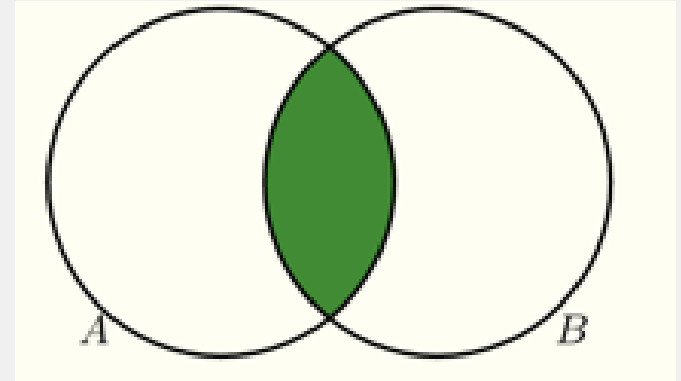**Co-interior angles add to 180º**
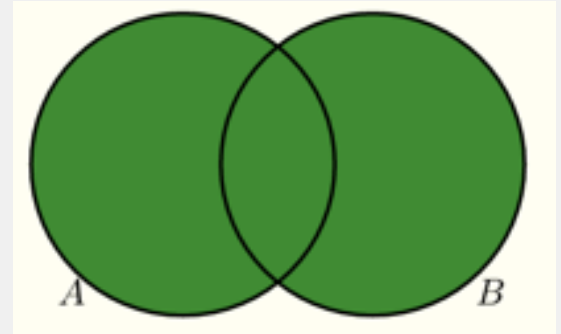
Pythagoras Theorem

$$a^2 + b^2 = c^2$$

SOH CAH TOA

Set Notation
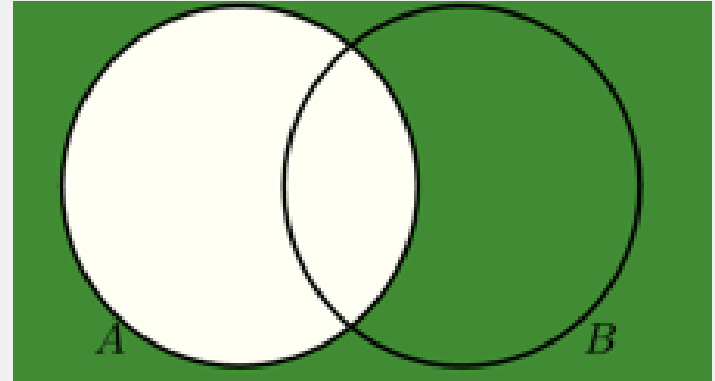

$$a \cap b$$

Set Notation

$$a \cup b$$

Set Notation

$$a'$$

Percentage Change Formula

$$\frac{Change}{Original} \times 100$$

Compound Interest Formula

$$Starting\ Amount \times Multiplier^n$$

Volume of Prism

$$Area\ of\ Crosssection\ \times\ Length$$

Volume of Cylinder

$$\pi r^2 \times h$$

If you're given two points (x_1, y_1) and (x_2, y_2)

Gradient Formula

$$\frac{y_2 - y_1}{x_2 - x_1}$$

If you're given two points (x_1, y_1) and (x_2, y_2)

Midpoint Formula

$$(\frac{x_1+x_2}{2}, \frac{y_1+y_2}{2})$$

If you're given two points (x_1, y_1) and (x_2, y_2)

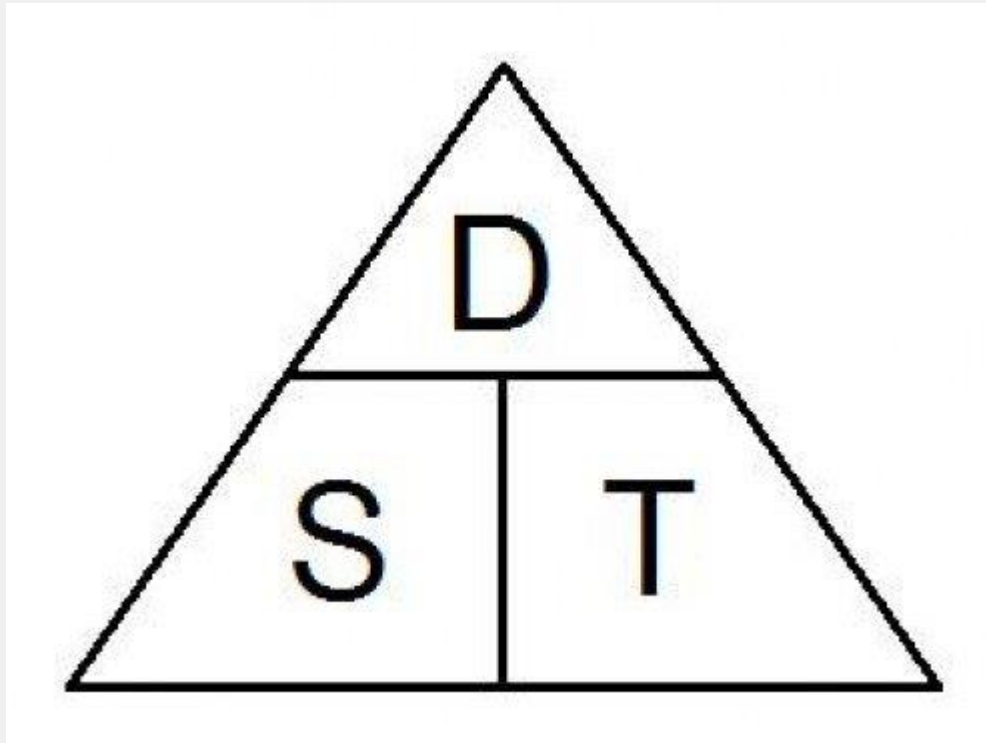## Line Length Formula

$$\sqrt{(y_2 - y_1)^2 + (x_2 - x_1)^2}$$

Mode – Most Common

Median – Middle Number

Range – Largest Value – Smallest Value

Mean – Sum of numbers divided by total amount of numbers

Speed, Distance and Time Formula Triangle

Mass, Density & Volume Formula Triangle