

AC Complex Numbers

Phasor Addition

A step-by-step guide

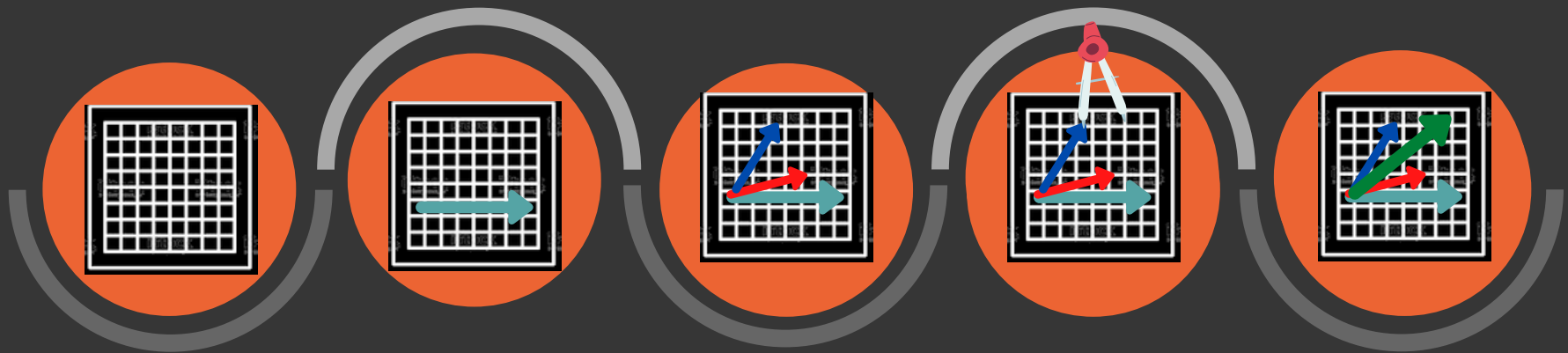
Phasor Maths Conventions

Reference phasor is left to right horizontally from the origin

Voltage = open arrow head

Current = closed arrow head

Phase rotation is anticlockwise



Determine the Scale and Reference of the phasor diagram.

Put the reference phasor in place.
Series = Current.
Parallel = Voltage.

Place the phasors to be "Added" on the diagram to scale.

Use a compass to measure first phasor. Put compass point on tip of second phasor draw an arc. Repeat the process measuring the second phasor.

From where the two arcs cross is the addition of the two phasors projected back to the origin. Length = magnitude and angle in degrees from the reference is direction.