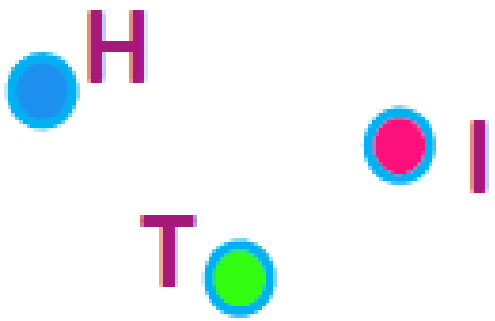
point

represented by a dot and is thought of having no length, width, or thickness



symbolic notation: ●H

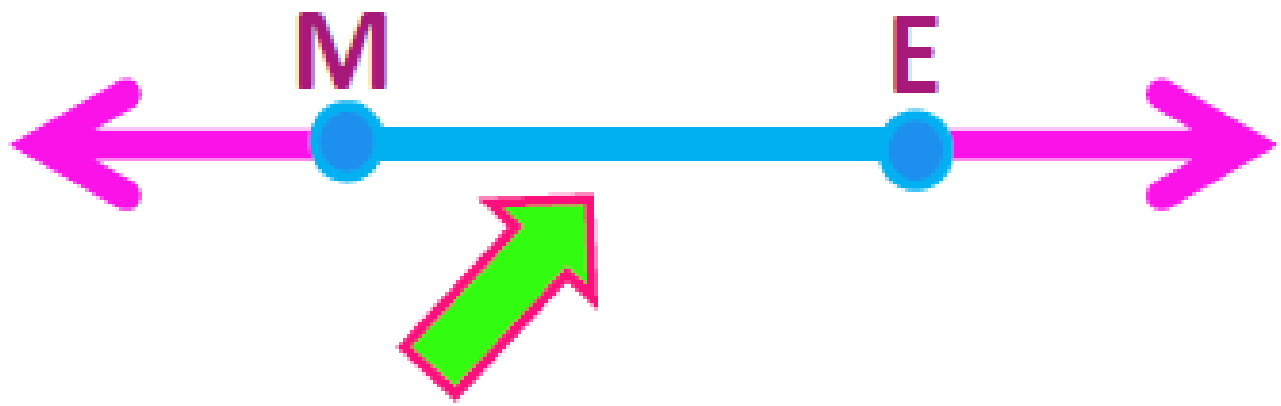
line

represents an infinite set of points with no thickness and its length continues in two opposite directions indefinitely

symbolic notation: $\overleftrightarrow{ST}$

line segment

a part of a line between two points on a line

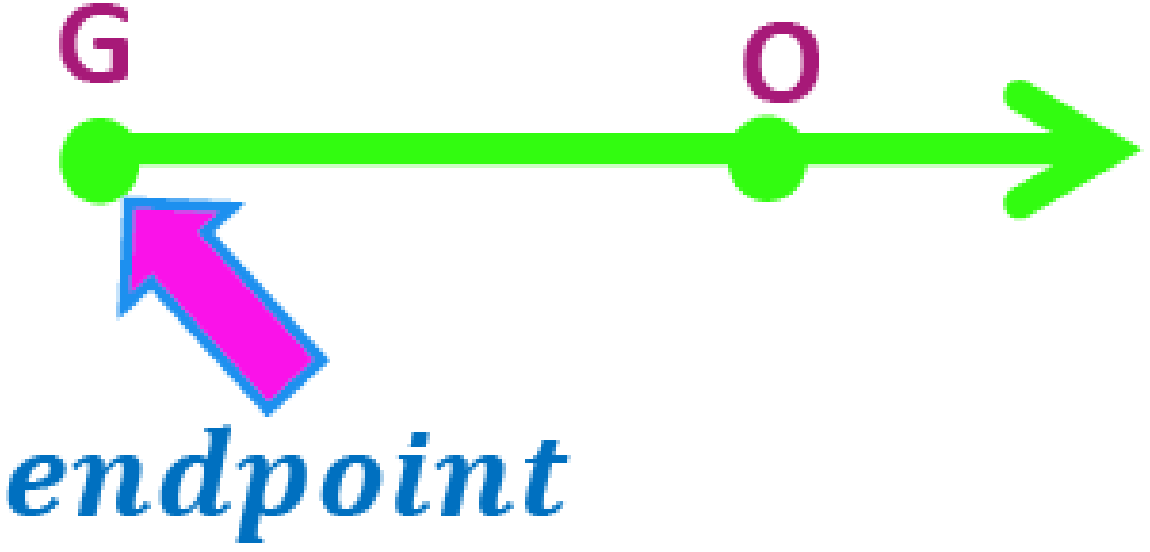


line segment

symbolic notation: $\overline{ME}$

ray

a part of a line that begins at a point and continues forever in one direction

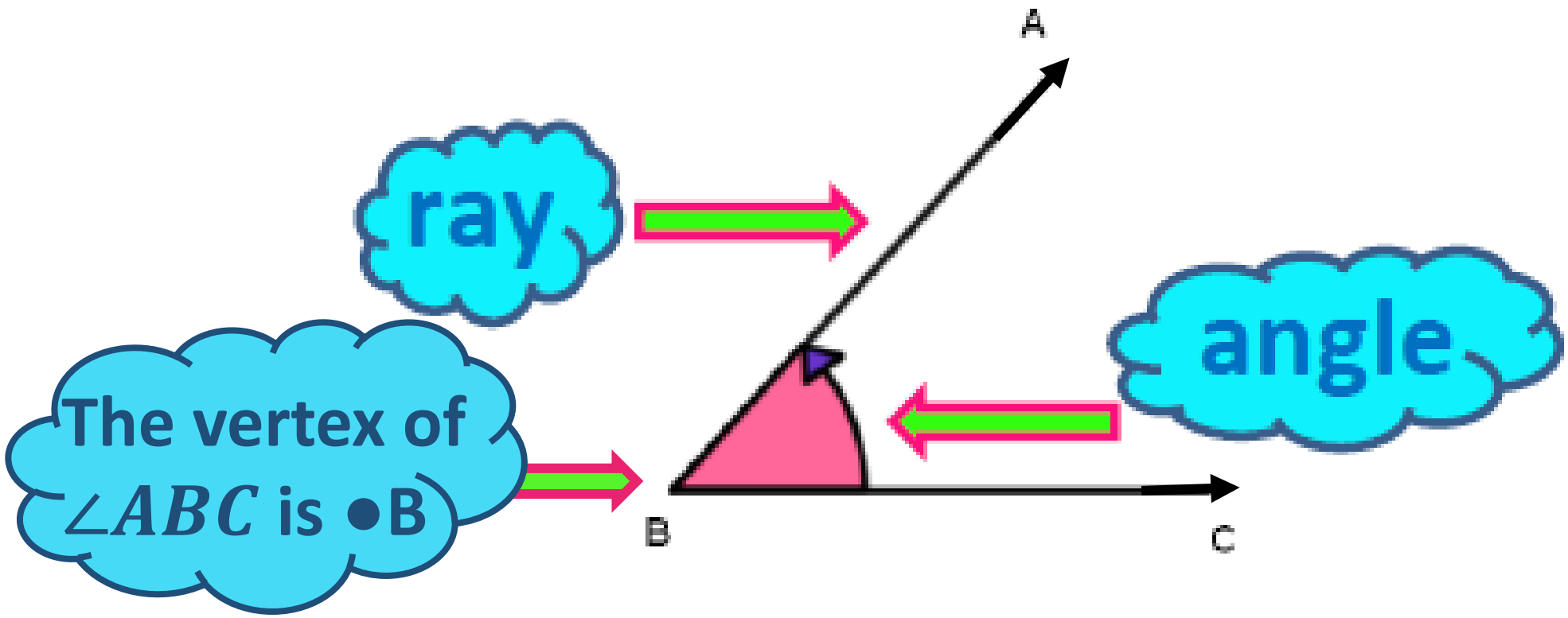


symbolic notation:

$\overrightarrow{GO}$

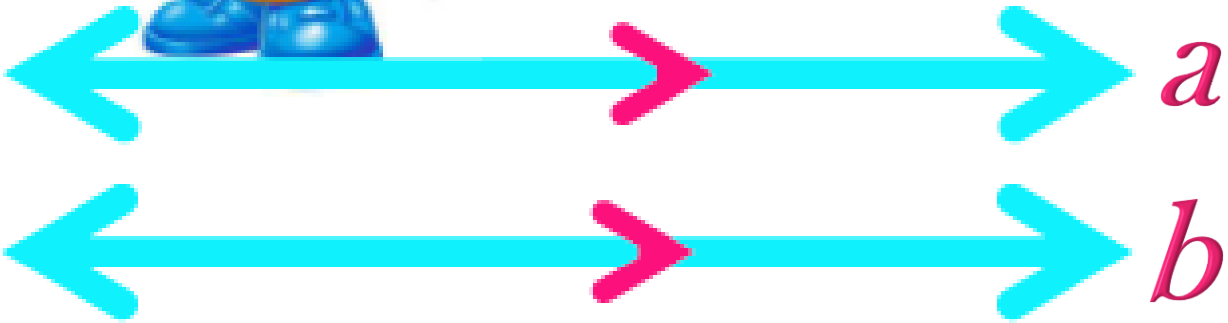
angle

a figure created by two distinct rays that share a common endpoint



parallel lines

Parallel lines have the same slope but different y-intercepts.



So, a ∥ b

Parallel lines lie in the same plane and do not intersect.

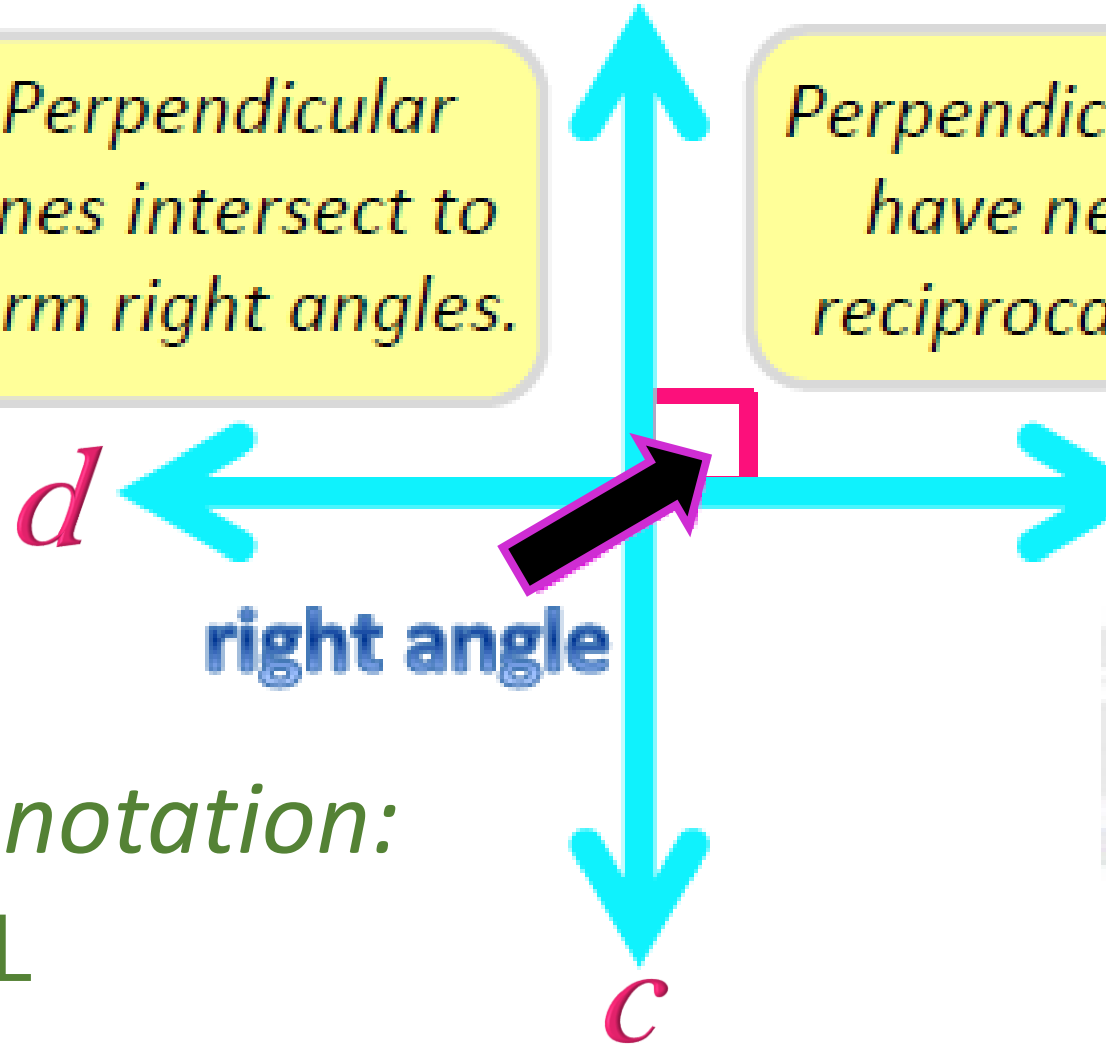
symbolic notation:

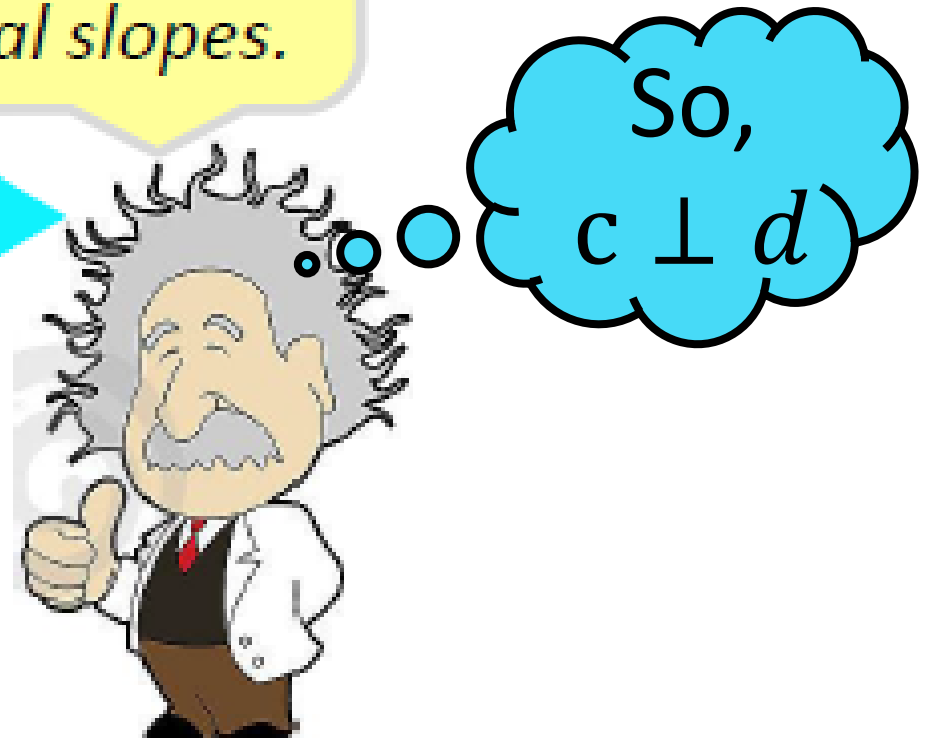
∥

perpendicular lines

Perpendicular lines intersect to form right angles.

Perpendicular lines have negative reciprocal slopes.

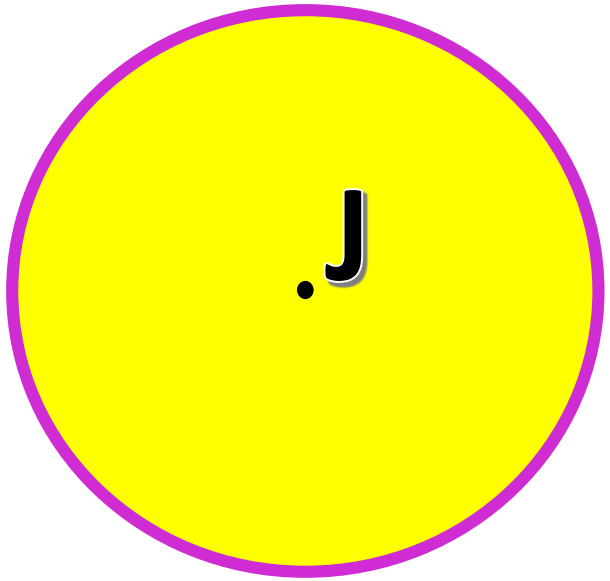




symbolic notation:

⊥

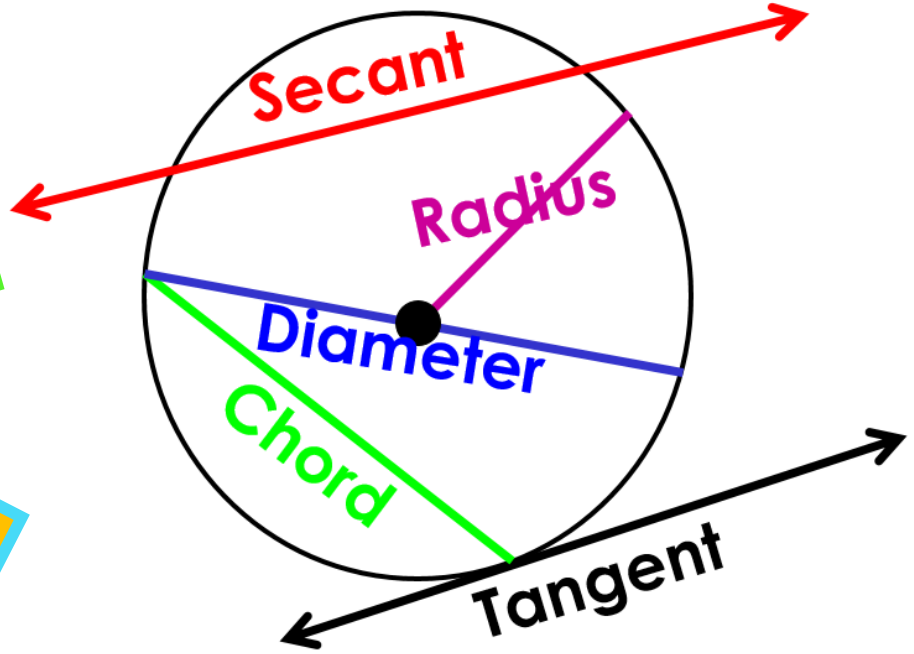
Circle



Symbolic Notation: ⊙J

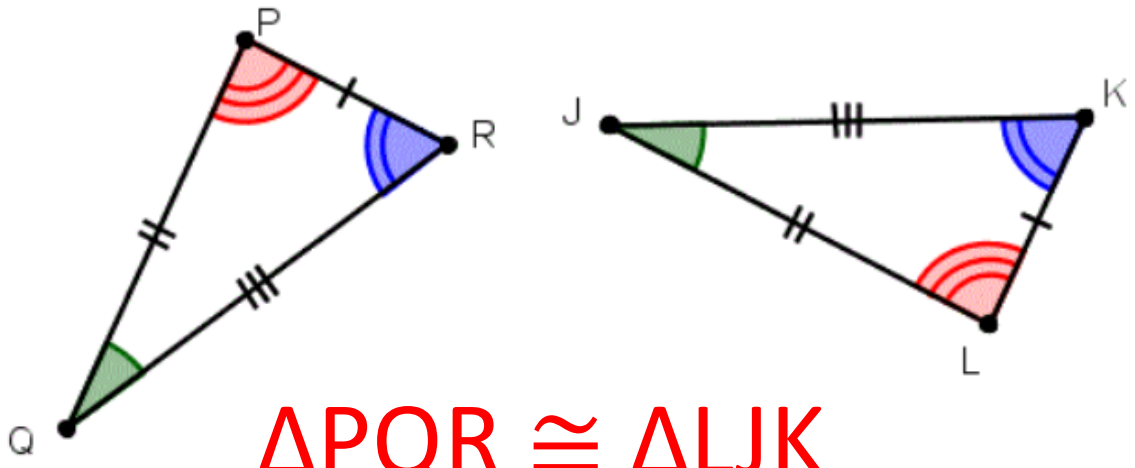
The set of all points equidistant from a point in a plane

Also recognize these terms



congruent

Two figures, segments, triangles, etc. that have the same size, same shape, same measure



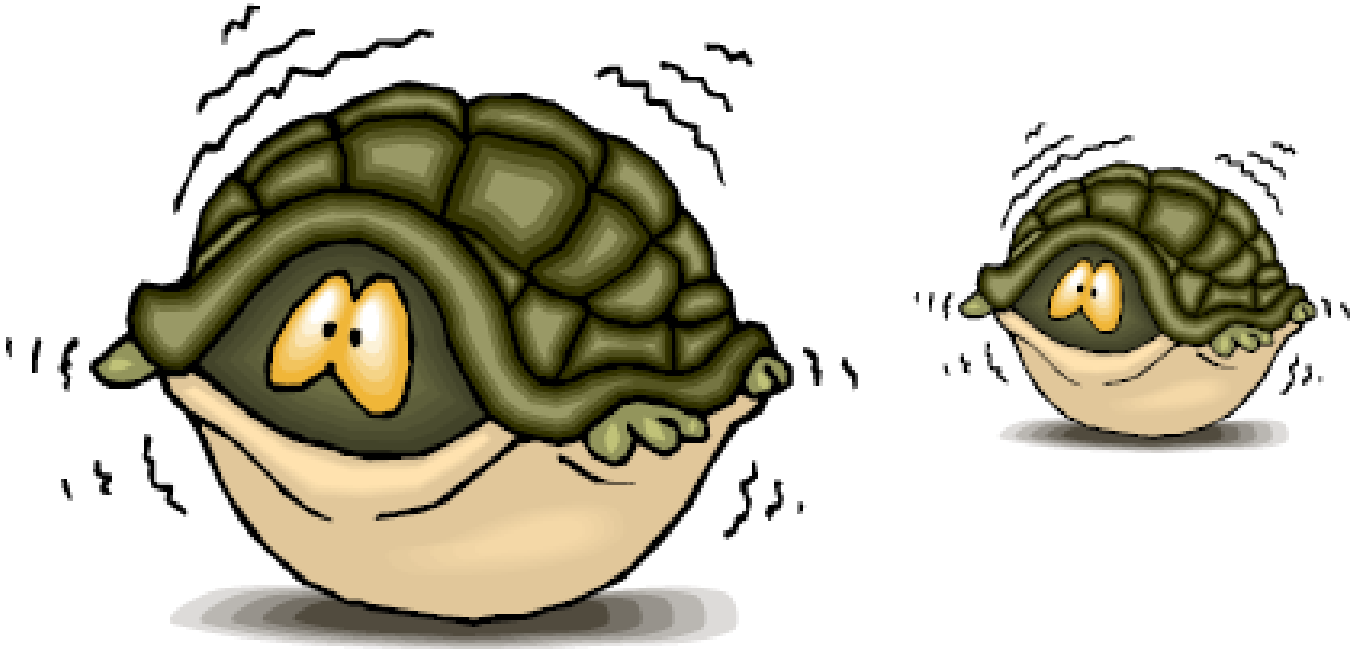
$\Delta PQR \cong \Delta LJK$

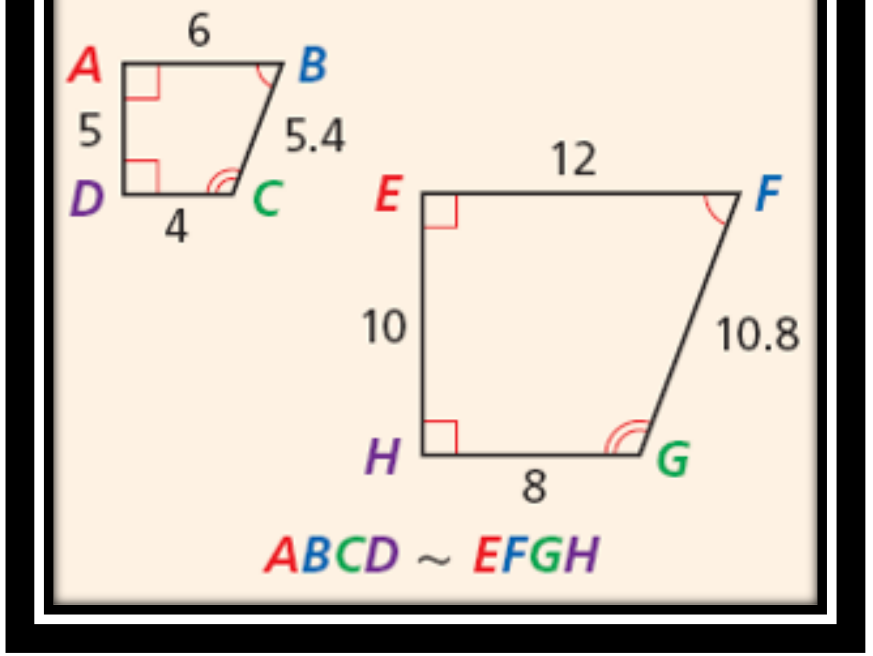
symbolic notation:

$\cong$

similar figures

figures that have the same shape
but not necessarily the same size

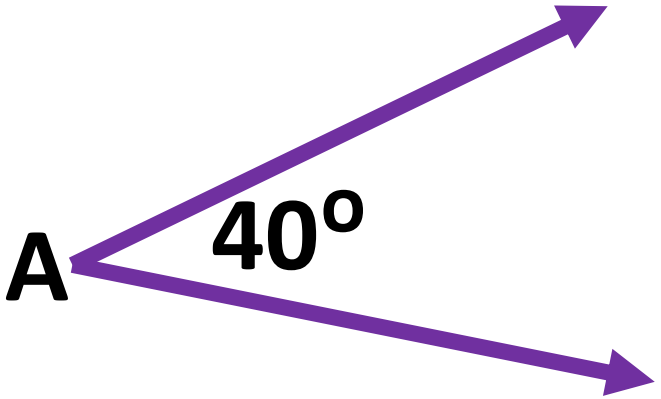




Symbolic Notation:
~

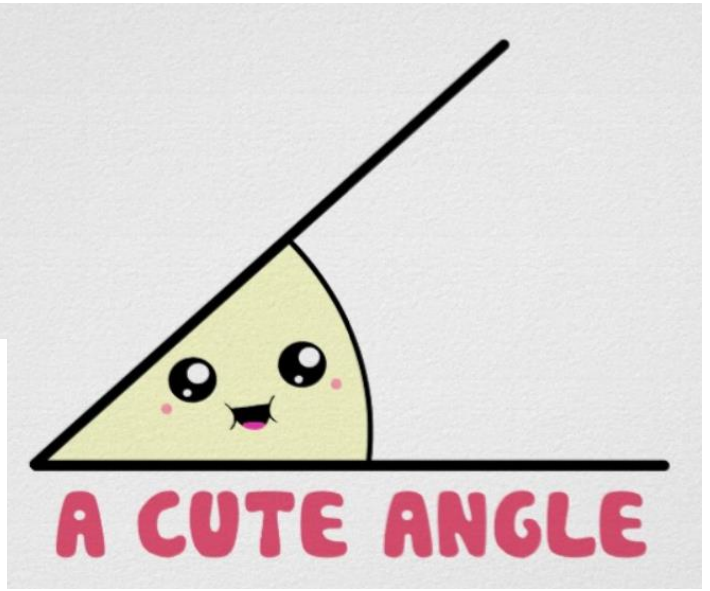
acute angle

an angle whose measure is less than 90^o



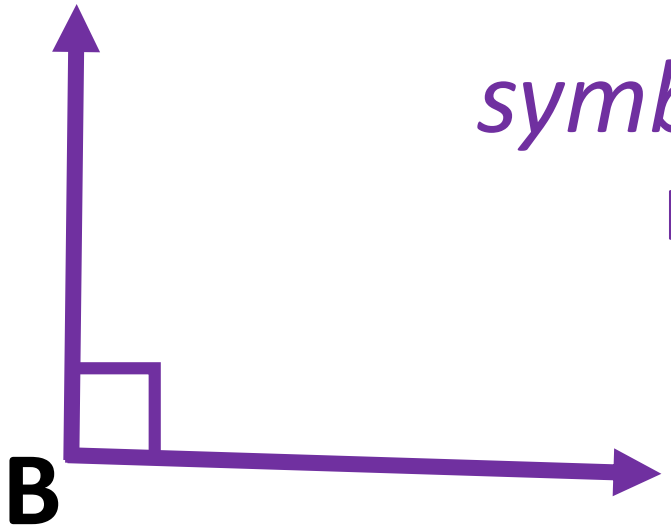
symbolic notation:

$m\angle A = 40^o$



right angle

an angle whose measure is exactly 90°

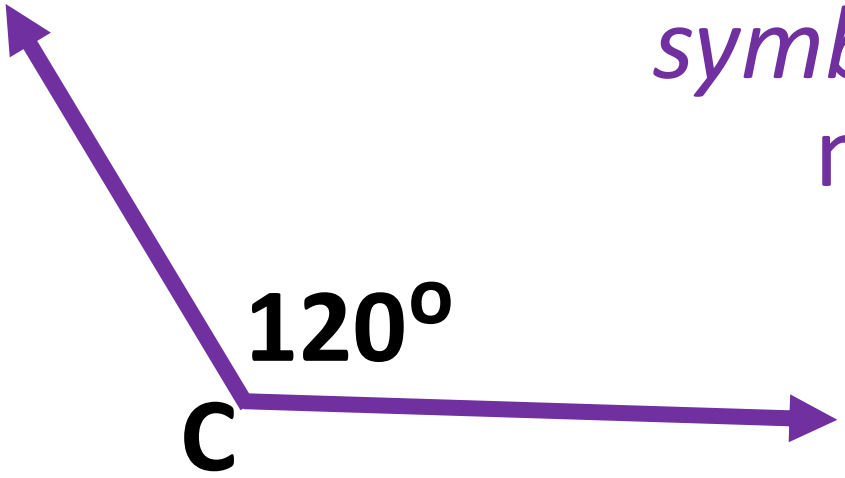


symbolic notation:

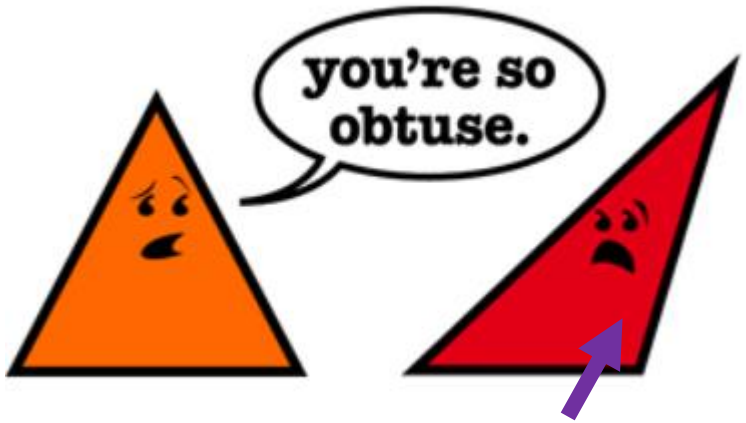
$m\angle B = 90^\circ$

obtuse angle

an angle whose measure is greater than 90°



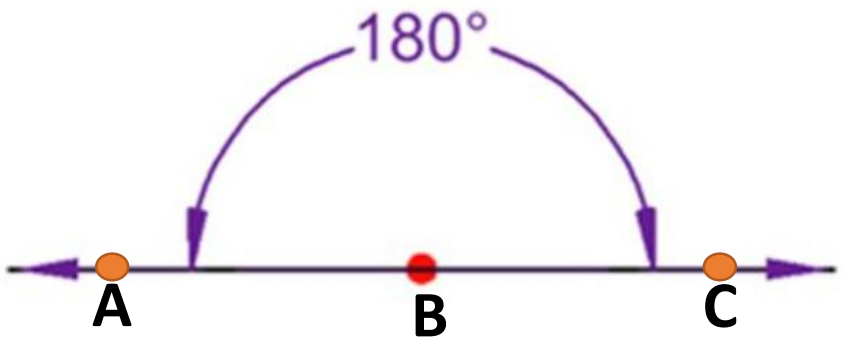
symbolic notation:
$m\angle C = 120^\circ$



(obtuse angle)

straight angle

an angle whose measure is exactly 180^o



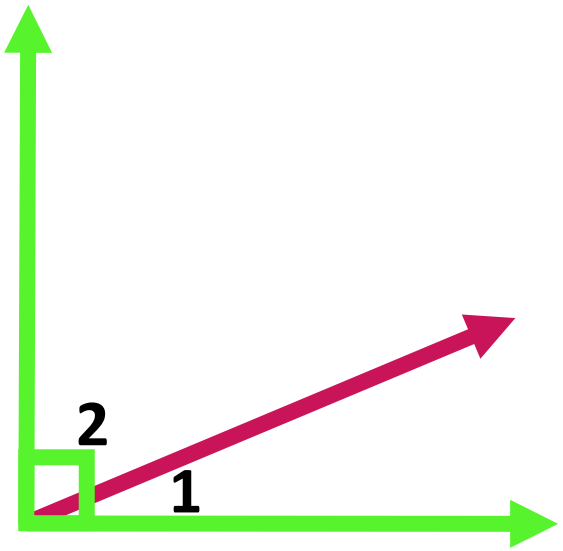
symbolic notation:

$m\angle ABC = 180^o$

HINT: THERE IS ONLY 1 STRAIGHT ANGLE…(thus a straight angle is different from supplementary angles!!!)

Complementary Angles

two angles whose sum is equal to 90^o



$m\angle 1 + m\angle 2 = 90^o$

symbolic notation

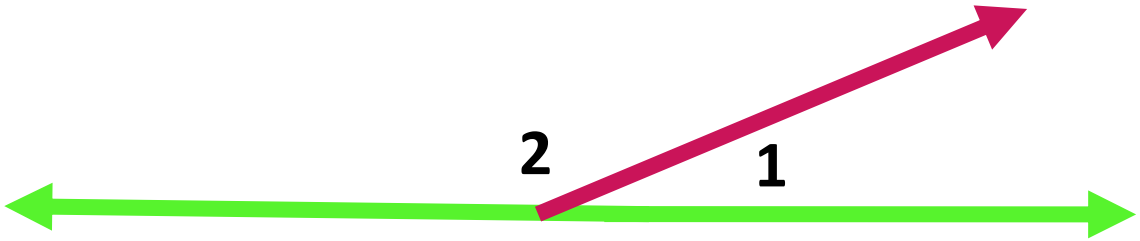
$\angle 1$ and $\angle 2$ are complementary

Supplementary Angles

symbolic notation

∠1 and ∠2 are supplementary

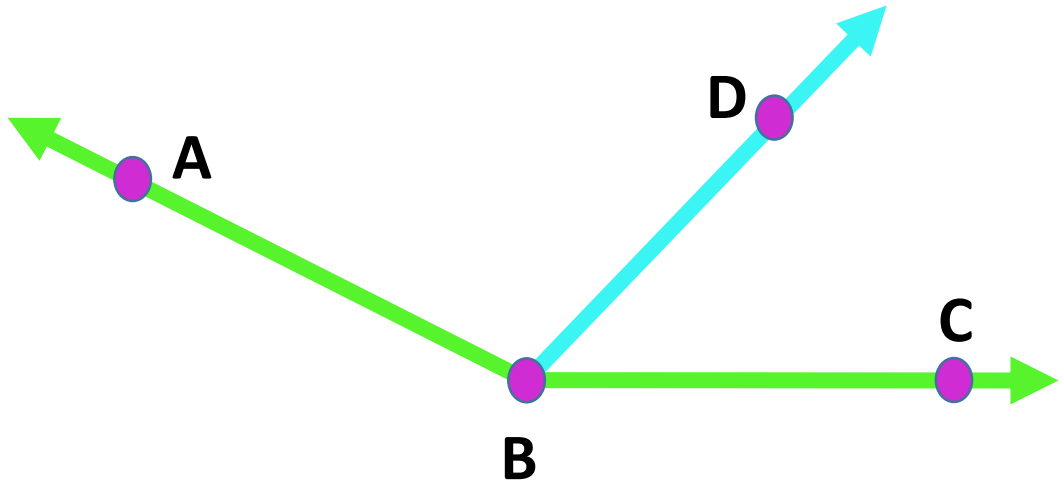
two angles whose sum is equal to 180^o



$m\angle 1 + m\angle 2 = 180^o$

Adjacent Angles

two angles that share a common ray

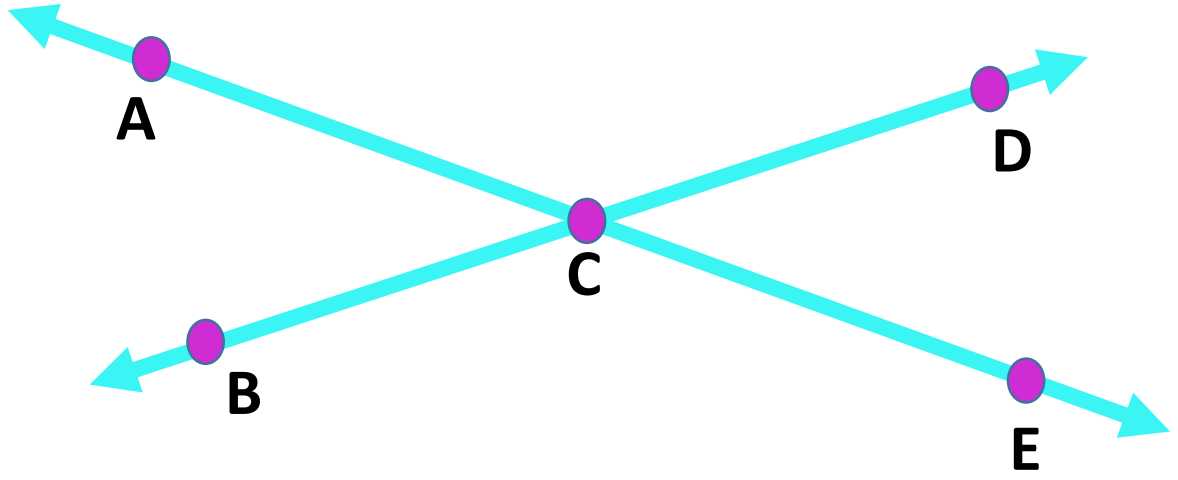


symbolic notation

∠ABD and ∠DBC are adjacent angles

Vertical Angles

symbolic notation
∠ACB and ∠DCE are vertical angles

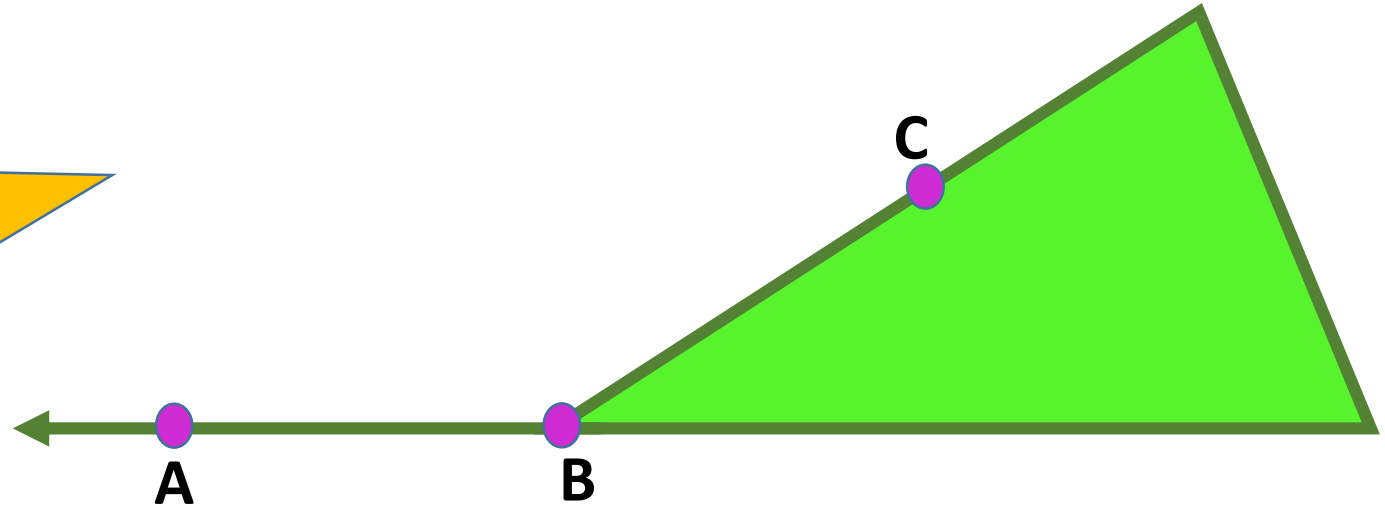


two angles that are opposite of each other and share a common vertex

Exterior Angles

symbolic notation

∠ABC is an exterior angle



an angle that lies on the exterior of a figure