

Geometry symbols

Symbol	Symbol Name	Meaning / definition	Example
\angle	angle	formed by two rays	$\angle ABC = 30^\circ$
\sphericalangle	measured angle		$\sphericalangle ABC = 30^\circ$
\sphericalangle	spherical angle		$\sphericalangle AOB = 30^\circ$
\perp	right angle	$= 90^\circ$	$\alpha = 90^\circ$
$^\circ$	degree	1 turn = 360°	$\alpha = 60^\circ$
deg	degree	1 turn = 360deg	$\alpha = 60\text{deg}$
'	prime	arcminute, $1^\circ = 60'$	$\alpha = 60^\circ 59'$
"	double prime	arcsecond, $1' = 60''$	$\alpha = 60^\circ 59' 59''$
\leftrightarrow AB	line	infinite line	
AB	line segment	line from point A to point B	
\rightarrow AB	ray	line that start from point A	
\widehat{AB}	arc	arc from point A to point B	$\widehat{AB} = 60^\circ$
\perp	perpendicular	perpendicular lines (90° angle)	$AC \perp BC$
\parallel	parallel	parallel lines	$AB \parallel CD$

Symbol	Symbol Name	Meaning / definition	Example
\cong	congruent to	equivalence of geometric shapes and size	$\triangle ABC \cong \triangle XYZ$
\sim	similarity	same shapes, not same size	$\triangle ABC \sim \triangle XYZ$
Δ	triangle	triangle shape	$\triangle ABC \cong \triangle BCD$
$ x-y $	distance	distance between points x and y	$ x-y = 5$
π	pi constant	$\pi = 3.141592654\dots$ is the ratio between the circumference and diameter of a circle	$c = \pi \cdot d = 2 \cdot \pi \cdot r$
rad	radians	radians angle unit	$360^\circ = 2\pi \text{ rad}$
c	radians	radians angle unit	$360^\circ = 2\pi ^c$
grad	gradians / gons	grads angle unit	$360^\circ = 400 \text{ grad}$
g	gradians / gons	grads angle unit	$360^\circ = 400 ^g$