

Fill in the Blanks

Angles in Regular Polygons

Number of Sides	Sum of Interior Angles	Size of an Interior Angle	Size of an Exterior Angle
9	$(9 - 2) \times 180 = 1260^\circ$	$\frac{1260}{9} = 140^\circ$	$\frac{360}{9} = 40^\circ$
5	$(5 - 2) \times 180 = 540^\circ$	$\frac{540}{5} = 108^\circ$	$\frac{360}{5} = 72^\circ$
12	$(12 - 2) \times 180 = 1800^\circ$	$\frac{1800}{12} = 150^\circ$	$\frac{360}{12} = 30^\circ$
8	$(8 - 2) \times 180 = 1080^\circ$	$\frac{1080}{8} = 135^\circ$	$\frac{360}{8} = 45^\circ$
15	$(15 - 2) \times 180 = 2340^\circ$	$\frac{2340}{15} = 156^\circ$	$\frac{360}{15} = 24^\circ$
36	$(36 - 2) \times 180 = 6120^\circ$	$\frac{6120}{36} = 170^\circ$	$\frac{360}{36} = 10^\circ$
6	$(6 - 2) \times 180 = 720^\circ$	$\frac{720}{6} = 120^\circ$	60°
10	$(10 - 2) \times 180 = 1440^\circ$	144°	$\frac{360}{10} = 36^\circ$
18	2880°	$\frac{2880}{18} = 160^\circ$	$\frac{360}{18} = 20^\circ$
7	900°	$\frac{900}{7} = 128\frac{4}{7}^\circ$	$\frac{360}{7} = 51\frac{3}{7}^\circ$
20	$(20 - 2) \times 180 = 3240^\circ$	162°	$\frac{360}{20} = 18^\circ$
16	$(16 - 2) \times 180 = 2520^\circ$	$\frac{2520}{16} = 157.5^\circ$	22.5°
24	$(24 - 2) \times 180 = 3960^\circ$	165°	$\frac{360}{24} = 15^\circ$
x	$(x - 2) \times 180$	$\frac{(x - 2) \times 180}{x}$	$\frac{360}{x}$