

Measuring in Degrees using a 360 Degree Protractor

Quick math: Divide the circle (360 degrees) by the number of number of sections required e.g.: 360 divided by 10 sections = each section is 36 degrees

# of sections	degrees in each section	mark at
2	180	0, 180
3	120	0, 120, 240
4	90	0, 90, 180, 270
5	72	0, 72, 144, 216, 288
6	60	0, 60, 120, 180, 240, 300
8	45	0, 45, 90, 135, 180, 225, 270, 315
9	40	0, 40, 80, 120, 160, 200, 240, 280, 320
10	36	0, 36, 72, 108, 144, 180, 216, 252, 288, 324
12	30	0,30, 60, 90, 120, 150, 180, 210, 240, 270, 300, 330
16	22½	0, 22.5, 45, 67.5, 90, 112.5, 135, 157.5, 180, 202.5, 225, 247.5, 270, 292.5, 315, 337.5
18	20	0, 20, 40, 60, 80, 100, 120, 140, 160, 180, 200, 220, 240, 260, 280, 300, 320, 340
20	18	0, 18, 36, 54, 72, 90, 108, 126, 144, 162, 180, 198, 216, 234, 252, 270, 288, 306, 324, 342
24	15	0, 15, 30, 45, 60, 75, 90, 105, 120, 135, 150 ,165, 180, 195, 210,225, 240, 255, 270, 285, 300, 315, 330, 345

**Measuring in Degrees using a 180 Degree Protractor**

**Quick math: Divide the circle (360 degrees) by the number of number of sections required e.g.: 360 divided by 10 sections = each section is 36 degrees**

**For an *even* number of sections, the circle is measured in two halves: mark the sections as indicated, then reposition protractor and repeat for second half.**

<b># of sections</b>	<b>degrees in each section</b>	<b>mark at</b>
2	180	0, 180
4	90	0, 90, 180
6	60	0, 60, 120, 180
8	45	0, 45, 90, 135, 180
10	36	0, 36, 72, 108, 144, 180
12	30	0, 30, 60, 90, 120, 150, 180
16	22½	0, 22.5, 45, 67.5, 90, 112.5, 135, 157.5, 180
18	20	0, 18, 20, 40, 60, 80, 100, 120, 140, 160, 180
20	18	0, 36, 54, 72, 90, 108, 126, 144, 162, 180
24	15	0, 15, 30, 45, 60, 75, 90, 105, 120, 135, 150, 165, 180

**When dividing a circle for an *odd* number of sections with a 180 degree protractor mark and then reposition protractor and repeat as indicated below.**

<b># of sections</b>	<b>mark at</b>
3	120
5	72
9	40