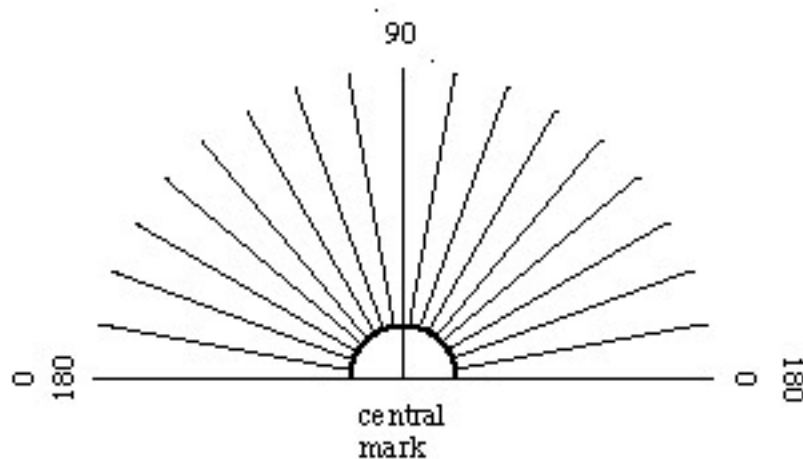


Measuring Angles with a Protractor

After measuring angles with wedges, and simple protractors (like the 15° protractor), you will understand better how to use the standard protractor. This instrument to measure angles is difficult for students for many reasons. The unit of measurement 1° is very small, so that we do not have an intuitive feeling of how big 1° is. Because 1° is so small, the subdivisions are very close together. Even if the marks are numbered only every 10° , the protractor looks very busy. There are two scales running simultaneously, one from left to right and a second from right to left. Some protractors do not have lines connecting the endpoints of the angle with its vertex, so that some people find it hard to understand what it is that they are measuring.

Activity 1. Three important points on the protractor

Find the marks corresponding to 0° and 180° on both sides of the protractor. There should be a line segment on the protractor joining the marks on opposite sides of the protractor. Find the mark for the midpoint of this segment (this we will call the central mark).



The central mark of the protractor needs to be on the vertex of the angle you want to measure. One leg of the angle should pass through the 0° mark on one side of the protractor. Look for the number closest to the other leg of the angle. That number will indicate the measure of the angle.