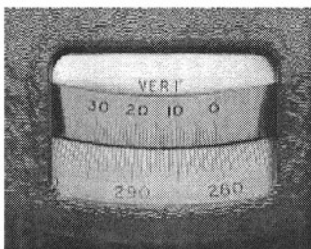


Reading the Vernier Scales

To read the angle, first find where the zero point of the vernier scale aligns with the degree plate and record the value. If the zero point is between two lines, use the smaller value. In Figure 6, below, the zero



point on the vernier scale is between the 155° and $155^\circ 30'$ marks on the degree plate, so the recorded value is 155° .

Now use the magnifying glass to find the line on the vernier scale that aligns most closely with any line on the degree scale. In the figure, this is the line corresponding to a measurement of 15 minutes of arc. Add this value to the reading recorded above to get the correct measurement to within 1 minute of arc: that is, $155^\circ + 15' = 155^\circ 15'$.

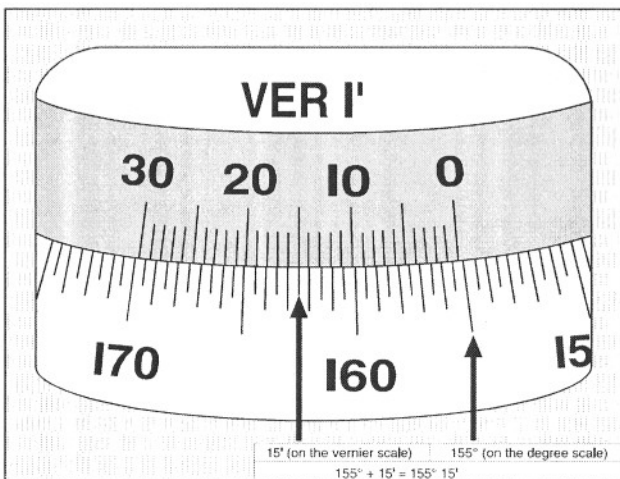


Figure 6 Reading the Vernier Scales