

Measuring Line Segments

Comparing Two Line Segments

Comparing two line segments implies establishing between their lengths whether one line segment is greater than or equal to or less than the other line segment.

Comparison of line segment can be done in several ways.

- ⇒ **(i) Comparison by observation:** Line segments can be compared easily by observation by placing a line segment below another segment and judging the length visually.

Example: Compare the following two line segments by observation:

\overline{PQ} \overline{AB}

Solution: \overline{PQ} is longer than \overline{AB} , as \overline{PQ} extends farther to the right of \overline{AB} .

- ⇒ **(ii) Comparison by Tracing:** Line segments can also be compared by using a tracing paper. This method is more accurate than Comparison by observation.

- ⇒ **(iii) Comparison Using Divider:** Divider is a geometrical instrument which has two arms hinged together with the help of a knob at one end. The other ends of the two arms have metallic needles. To compare the given line segments PQ and YX , we place the needle of one hand of the divider at point Y and open its other arm carefully so that the needle of the other arms falls at X .

