Construction of a Line Segment

1. **Choose the correct answer:**

    a. A straight edged thin strip, which is used to find the small lengths of objects is known as:

    i) protractor ☐   ii) divider ☐   iii) ruler ☐

    b. This instrument has two arms one of them has metal end point and the other arm has screw arrangement is known as

    i) compass ☐   ii) protractor ☐   iii) set squares ☐

2. **Draw a line segment of length 7.6 cm using a ruler.**

3. **Construct $\overline{AB}$ of length 8.4 cm. From this, cut a line $\overline{AC}$ of length 3.4 cm, measure $\overline{BC}$.**

4. **Given $\overline{AB}$ of length 3.8 cm, construct $\overline{PQ}$ such that the length of $\overline{PQ}$ is twice that of $\overline{AB}$. Verify by measurement.**

5. **Solve the following:**

    a. Draw a line segment AB = 6 cm. Draw BC perpendicular to AB using ruler and compasses.

    b. Draw a line segment DP = 8 cm. Construct ∠POQ = 90°, such that DQ = 6 cm. Join P and Q, then measure the length of PQ.

    c. Draw a line segment DA = 5 cm. Use ruler and compass to construct angle AOB = 60°, such that OB = 3cm. Join A and B, then measure the length of AB.