

Board – CBSE

Class – 7th

Topic – Congruence of Triangles 7.1

**Q.1** Complete the following statements:

(a) Two-line segments are congruent if \_\_\_\_\_.

(b) Among two congruent angles, one has a measure of  $70^\circ$ ; the measure of the other angle is \_\_\_\_\_.

(c) When we write  $\angle A = \angle B$ , we actually mean \_\_\_\_\_.

**Sol:** (a) They have the same length

(b)  $70^\circ$

(c)  $m \angle A = m \angle B$

**Q.2** Give any two real-life examples for congruent shapes.

**Sol:** (i) Sheets of same letter pad

(ii) Biscuits in the same packet

**Q.3** If  $\triangle ABC \cong \triangle FED$  under the correspondence  $ABC \leftrightarrow FED$ , write all the Corresponding congruent parts of the triangles.

**Sol:** If these triangles are congruent, then the corresponding angles and sides will be equal to each other.

$\angle A \leftrightarrow \angle F$

$\angle B \leftrightarrow \angle E$

$\angle C \leftrightarrow \angle D$

$\overline{AB} \leftrightarrow \overline{FE}$

$\overline{BC} \leftrightarrow \overline{ED}$

$\overline{CA} \leftrightarrow \overline{DF}$

**Q.4** If  $\triangle DEF \cong \triangle BCA$ , write the part(s) of  $\triangle BCA$  that correspond to

(i)  $\angle E$             (ii)  $\overline{EF}$             (iii)  $\angle F$             (iv)  $\overline{DF}$

**Sol:** (i)  $\angle C$             (ii)  $\overline{CA}$             (iii)  $\angle A$             (iv)  $\overline{BA}$