CBSE Class –VII Mathematics
NCERT Solutions
Chapter 7 Congruence of Triangles (Ex. 7.1)

Question 1. Complete the following statements:

1. Two line segments are congruent if _____.
2. Among two congruent angles, one has a measure of $70°$, the measure of other angle is _____.
3. When we write ∠A = ∠B, we actually mean _____.

Answer: (a) they have the same length
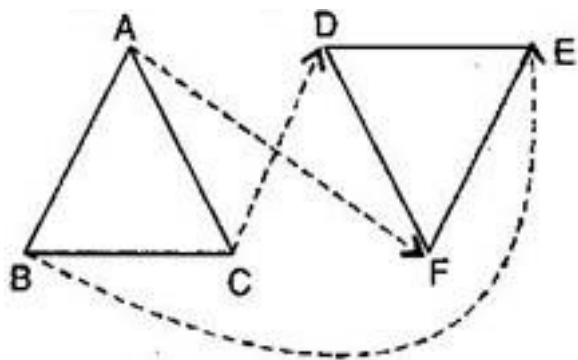
(b) $70°$

(c) $m∠A = m∠B$

Question 2. Give any two real time examples for congruent shapes.

Answer: (i) Two footballs

(ii) Two teacher's tables

Question 3. If $\triangle ABC \cong \triangle FED$ under the correspondence ABC ↔ FED, write all the corresponding congruent parts of the triangles.

Answer: Given: $\triangle ABC \cong \triangle FED$.

The corresponding congruent parts of the triangles are:

(i) ∠A ↔ ∠F

(ii) $\angle B \leftrightarrow \angle E$

(iii) $\angle C \leftrightarrow \angle D$

(iv) $\overline{AB} \leftrightarrow \overline{FE}$

(v) $\overline{BC} \leftrightarrow \overline{ED}$

(vi) $\overline{AC} \leftrightarrow \overline{FD}$

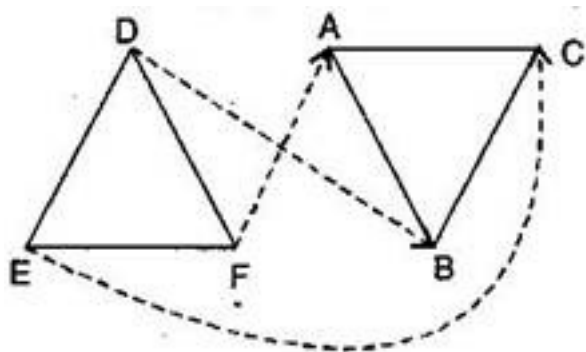**Question 4.** If $\triangle DEF \cong \triangle BCA$, write the part(s) of $\triangle BCA$ that correspond to:

i.$\angle E$

ii.$\overline{EF}$

iii.$\angle F$

iv.$\overline{DF}$

Answer: Given: $\triangle DEF \cong \triangle BCA$.

(i) $\angle E \leftrightarrow \angle C$

(ii) $\overline{EF} \leftrightarrow \overline{CA}$

(iii) $\angle F \leftrightarrow \angle A$

(iv) $\overline{DF} \leftrightarrow \overline{BA}$