

(1) Complete the following statement :

(a) Two line segments are congruent if they have same length.

(b) Among two congruent angles, one has a measure of 70° , the measure of the other angle is 70° .

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

(2) Given any two real-life examples for congruent shapes

Ans:- (i) Biscuits in the same packet.

(ii) Shaving blades of the same company.

(iii) ₹ 1 coins. (iv) Football of same company.

(3) If $\triangle ABC \cong \triangle FED$ under the correspondence $ABC \leftrightarrow FED$, write all the corresponding congruent parts of the triangle

Sol:- Given :- $\triangle ABC \cong \triangle FED$

Corresponding Angles

$$\angle A \leftrightarrow \angle F \text{ or } \angle A = \angle F$$

$$\angle B \leftrightarrow \angle E \text{ or } \angle B = \angle E$$

$$\angle C \leftrightarrow \angle D \quad \angle C = \angle D$$

Corresponding Sides

$$AB = FE \text{ or } AB \leftrightarrow FE$$

$$BC = ED \text{ or } BC \leftrightarrow ED$$

$$AC = FD \text{ or } AC \leftrightarrow FD$$

(4) If $\triangle DEF \cong \triangle BCA$, write the parts of $\triangle BCA$ that correspond to $\rightarrow \triangle DEF \cong \triangle BCA$

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

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

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

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