EXERCISE 10.3   PAGE: 200

1. Construct ΔDEF such that DE = 5 cm, DF = 3 cm and m∠EDF = 90°.

Solution:-
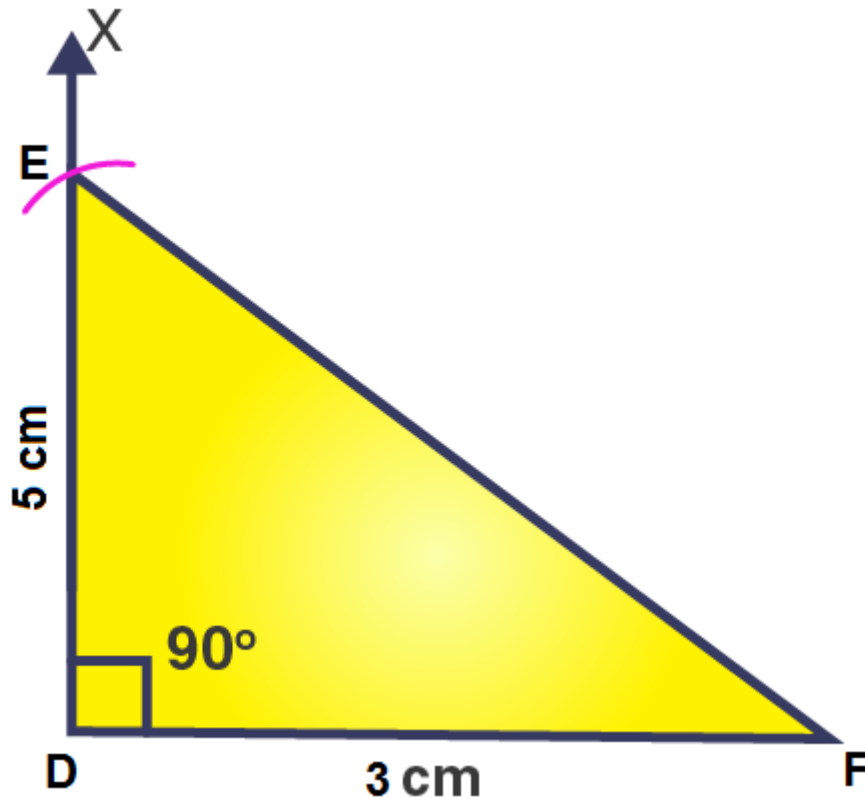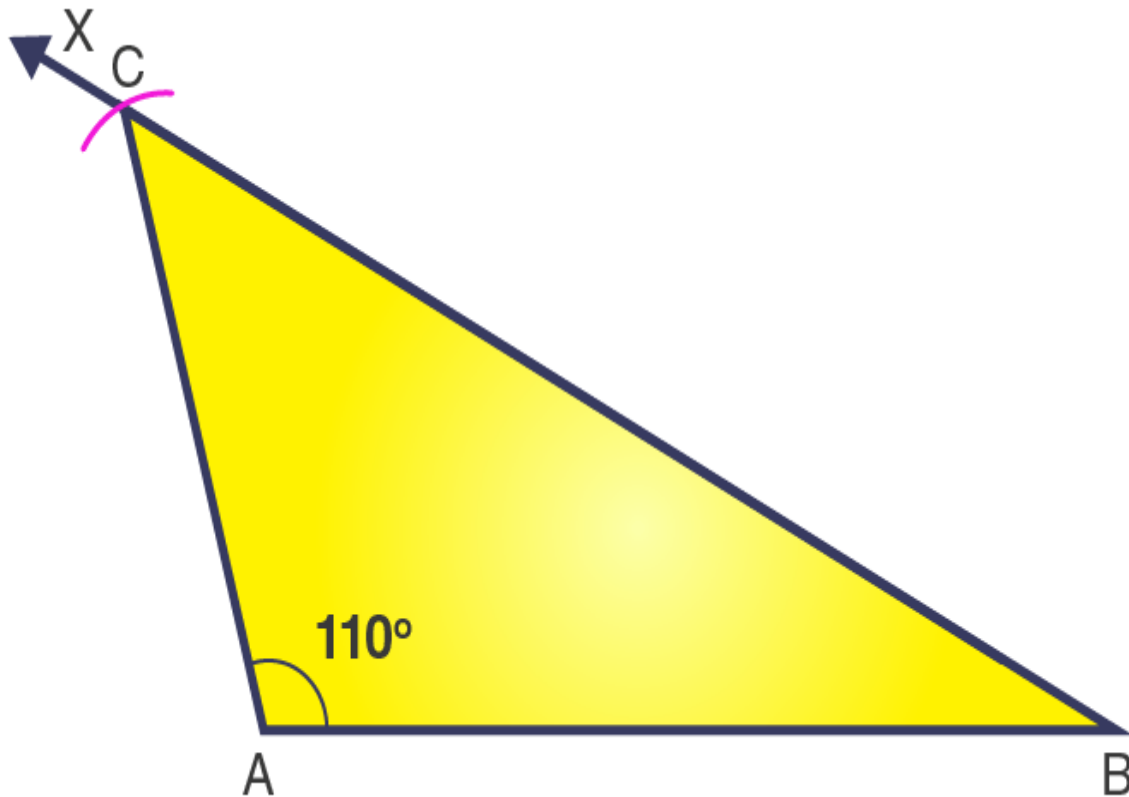
Steps of construction

1. Draw a line segment DF = 3 cm.

2. At point D, draw a ray DX to making an angle of 90° i.e., ∠XDF = 90°.

3. Along DX, set off DE = 5cm.

4. Join EF.

Then, ΔEDF is the required right-angled triangle.

2. Construct an isosceles triangle in which the lengths of each of its equal sides is 6.5 cm and the angle between them is 110°.
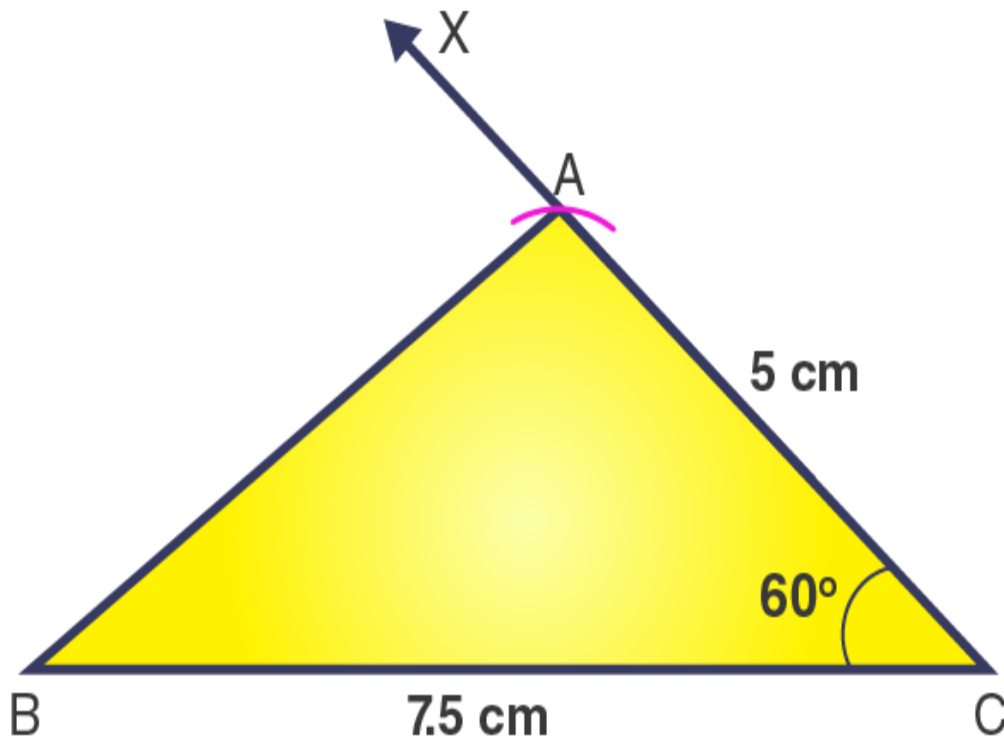
Solution:-

Steps of construction

1. Draw a line segment AB = 6.5 cm.

2. At point A, draw a ray AX to making an angle of 110°, i.e., ∠XAB = 110°.

3. Along AX, set off AC = 6.5cm.

4. Join CB.

Then, ΔABC is the required isosceles triangle.

3. Construct ΔABC with BC = 7.5 cm, AC = 5 cm and m∠C = 60°.

Solution:-

Steps of construction

1. Draw a line segment BC = 7.5 cm.

2. At point C, draw a ray CX to making an angle of 60°, i.e., ∠XCB = 60°.

3. Along CX, set off AC = 5cm.

4. Join AB.

Then, ΔABC is the required triangle.