

Mathematics

(www.tiwariacademy.net)

(Chapter – 5) (Introduction to Euclid's Geometry)(Exemplar Problems)
(Class – IX)

Exercise 5.3

Solve each of the following question using appropriate Euclid's axiom:

Question 7:

In the Fig.5.7, we have $\angle 1 = \angle 2$, $\angle 2 = \angle 3$. Show that $\angle 1 = \angle 3$.

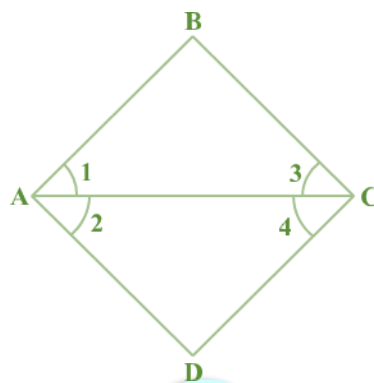


Fig.5.7

Answer 7:

Given that:

$$\angle 1 = \angle 2 \quad \dots (i)$$

and

$$\angle 2 = \angle 3 \quad \dots (ii)$$

According to Euclid's axioms, things which are equal to the same thing are equal to one another.

From equations (i) and (ii), we get

$$\angle 1 = \angle 3$$

