

Mathematics

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

Exercise 5.1

Write the correct answer in each of the following:

Question 12:

It is known that if $x + y = 10$ then $x + y + z = 10 + z$. The Euclid’s axiom that illustrates this statement is:

- (A) First Axiom (B) Second Axiom
(C) Third Axiom (D) Fourth Axiom

Answer 12:

(B) Second Axiom

The Euclid’s axiom that illustrates the given statement is second axiom, according to which. *If equals are added to equals, the wholes are equal.*



Euclid’s Axioms

- 1) *The things which are equal to the same thing are equal to one another.*
- 2) *If equals be added to the equals, the wholes are equal.*
- 3) *If equals be subtracted from equals, the remainders are equals.*
- 4) *Things which coincide with one another are equal to one another.*
- 5) *The whole is greater than the part.*
- 6) *Things which are double of the same thing are equal to one another.*
- 7) *Things which are halves of the same thing are equal to one another.*

