

CHAPTER : 12 THREE DIMENSIONAL GEOMETRY

EXERCISE: 12.1

QNo.1: A point is on x-axis. What are its y-coordinate and z-coordinate?

Soln Every point on x-axis has its y-coordinate and z-coordinate as Zero.

QNo.2 A point is in xz-plane. What can you say about its y-coordinate?

Sol: Every point in xz-plane has y-coordinate as ZERO.

QNo.3 Name the octants in which the following points lie

Sol:

Point	Lies in Octant.
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$(1, 2, 3)$	First I
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$(4, -2, 3)$	Fourth IV
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$(4, -2, -5)$	Eighth VIII
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$(4, 2, -5)$	Fifth V
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$(-4, 2, -5)$	Sixth VI
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$(-4, 2, 5)$	Second II
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$(-3, -1, 6)$	third III
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$(2, -4, -7)$	Eighth VIII.
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QNo 4 Fill in the blanks:

- (i) The x-axis and y-axis taken together determine a plane known as xy-plane.
- (ii) The coordinates of points in xy-plane are of form $(x, y, 0)$
- (iii) Coordinate planes divide the space into Eight. Octants.

