NCERT Solutions Class 11 Maths
Chapter 11: Introduction to Three Dimensional Geometry
Miscellaneous Exercise on Chapter 11

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Question 1

QUESTION

Three vertices of a parallelogram ABCD are A(3, −1, 2), B(1, 2, −4) and C(−1, 1, 2). Find the coordinates of the fourth vertex.

ANSWER

(1, −2, 8)

Question 2

QUESTION

Find the lengths of the medians of the triangle with vertices A(0, 0, 6), B(0, 4, 0) and C(6, 0, 0).

ANSWER

7, $\sqrt{34}$, 7

Question 3

QUESTION

If the origin is the centroid of the triangle PQR with vertices P(2a, 2, 6), Q(−4, 3b, −10) and R(8, 14, 2c), find the values of a, b and c.

ANSWER

a = -2, b = -(16)/(3), c = 2

Question 4

QUESTION

If A and B be the points (3, 4, 5) and (−1, 3, −7), respectively, find the equation of the set of points P such that PA^2 + PB^2 = k^2, where k is a constant.

ANSWER

x^2 + y^2 + z^2 - 2x - 7y + 2z = (k^2 - 109)/(2)

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