

Worksheet: Three-Dimensional Geometry

CBSE · Class 12 · Mathematics · 3 questions · 13 marks

Name: _____	Date: _____	Score: _____ / 13
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Q1. Find the vector and Cartesian equations of the line through (1, 2, 4) with direction ratios (2, 1, 3). *[3 marks]*

Q2. Find the distance of the point (2, 3, 5) from the plane $x + 2y - 2z = 9$. *[4 marks]*

Q3. Find the shortest distance between the lines $r = (\hat{i} + 2\hat{j} + 3\hat{k}) + \lambda(2\hat{i} - \hat{j} + \hat{k})$ and $r = (2\hat{i} - \hat{j} + \hat{k}) + \mu(2\hat{i} + \hat{j} - 2\hat{k})$. *[6 marks]*