

Worksheet: Three Dimensional Geometry

IGCSE · Class 12 · Mathematics · 5 questions · 15 marks

Name: _____	Date: _____	Score: _____ / 15
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Q1. Find the direction cosines of a line making equal angles with all three axes. *[2 marks]*

Q2. Find the vector equation of the line through (1,2,3) and (4,5,6). *[2 marks]*

Q3. Find the angle between the planes $x + 2y + 2z = 9$ and $2x + 3y + 6z = 8$. *[3 marks]*

Q4. Find the shortest distance between $r = (i+2j+k) + \lambda(i-j+k)$ and $r = (2i-j-k) + \mu(2i+j+2k)$. *[4 marks]*

Q5. Show the lines $(x-1)/2 = (y-2)/3 = (z-3)/4$ and $(x-4)/5 = (y-1)/2 = z$ are coplanar. *[4 marks]*
