Worksheet: Three Dimensional Geometry

Kerala State Board · Class 12 · Mathematics · 5 questions · 15 marks

Name: _____ Date: _____ Score: _____ / 15

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]*