

Check your understanding

9. What kind of a surface is described by the equation $(x - 1)^2 + (y - 2)^2 + (z - 3)^2 = (x - 4)^2 + (y - 5)^2 + (z - 6)^2$?
- (a) A sphere.
 - (b) Two spheres.
 - (c) A plane.
 - (d) None of the above.

Answer: (c)

Explanation: This is the plane consisting of all points that are equidistant from the points $(1, 2, 3)$ and $(4, 5, 6)$.