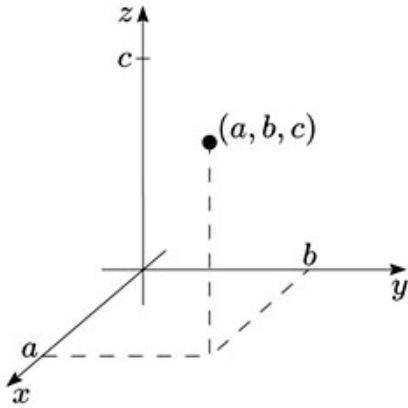


Distance in space

How would you determine the distance between two points in 3-space?

Start by figuring out the distance between a point (a, b, c) and the origin.



Can you generalize this to a distance formula between two points (x, y, z) and (a, b, c) ?

Distance formula for 3-space:

What is the definition of a sphere?

What is the equation of a sphere centered at the origin?

What is the equation of a sphere centered at the point (a, b, c) ?