



Math for the people, by the people.

Euclidean geometry of space

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Entry type	Topic
Classification	msc 51-01
Synonym	space geometry
Related topic	EuclideanGeometryOfThePlane
Related topic	AnalyticGeometry

Please help to list the existing and future entries on spatial geometry!

Basic objects

1. point
2. line, ray, line segment
3. plane
4. normal plane
5. dihedral angle
6. cylinder
7. cone
8. truncated cone
9. polyhedron
10. cuboid
11. sphere
12. parts of a ball
13. great circle
14. surface
15. solid angle
16. Plato's mathematics

Basic concepts and quantities

1. <http://planetmath.org/Congruencecongruence>
2. similarity in geometry
3. distance of non-parallel lines
4. angle between two lines
5. angle between line and plane
6. normal of plane
7. parallelism of line and plane
8. parallelism of two planes
9. angle between two planes
10. perpendicular planes
11. area of a spherical triangle
12. area of spherical zone
13. volume of spherical cap and spherical sector
14. volume of solid of revolution
15. Gaussian curvature
16. mean curvature at surface point
17. curvature (space curve)
18. Torricelli's trumpet

Analytic geometry

1. coordinate way
2. direction cosines
3. equation of plane
4. line in space
5. quadratic surfaces
6. tangent plane of quadratic surface
7. generatrices of one-sheeted hyperboloid
8. generatrices of hyperbolic paraboloid
9. ruled surface
10. developable surface
11. surface of revolution
12. torus
13. conic section