

Practice Questions of Lecture 29 to 34

- Q.1:** Find the nature of the origin on curve $x^3 + y^3 - 3axy = 0$.
- Q.2:** Find the trace of the surface $x^2 - y^2 + 3z^2 + 2xy + xz = 0$ with xy -plane, yz -plane and zx -plane.
- Q.3:** Check the symmetry of the surface $x^2 + z^2 - 4xy + xz = 0$.
- Q.4:** Find all intercepts of the surface $x^2 + 2y^2 - 3z^2 + 2xy + x - 2y + 4z = 0$.
- Q.5:** Find the equation of sphere with center $(2, -1, 5)$ and diameter = 4.
- Q.6:** Find the equation of sphere with center $(2, 1, 3)$ and tangent to the plane $2x + y + z = 2$.