

For the given quadric surface, describe the effect that changing the value of  $a$ ,  $b$  and  $c$  has on the shape of the surface:

1. Ellipsoid.
2. Cone.
3. Elliptic Paraboloid.
4. Hyperbolic Paraboloid.
5. Hyperboloid of One Sheet.
6. Hyperboloid of Two Sheets.