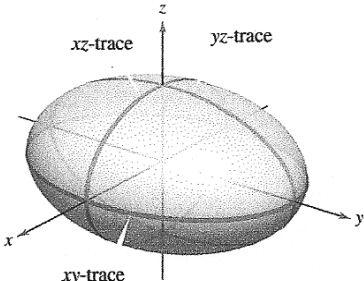
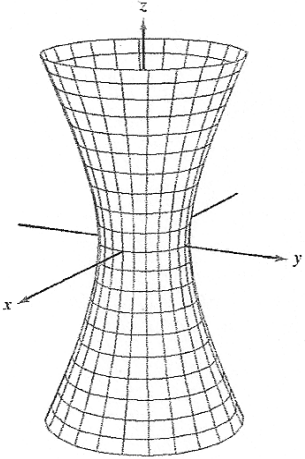
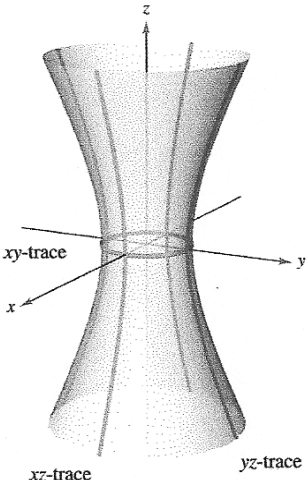
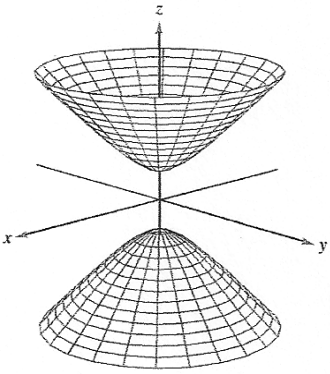
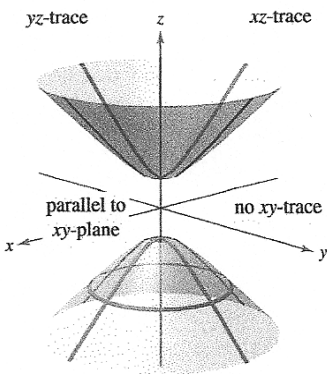
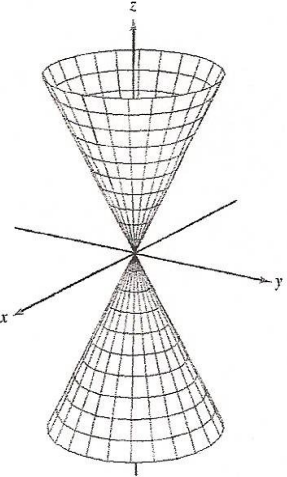
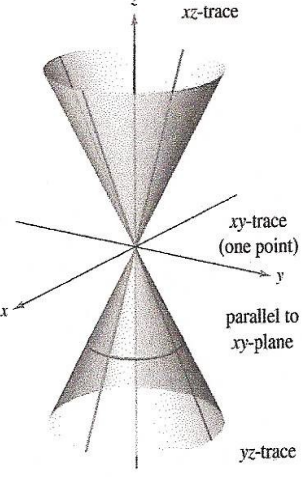
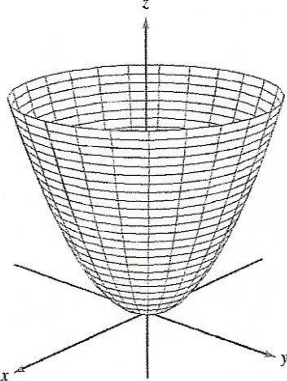
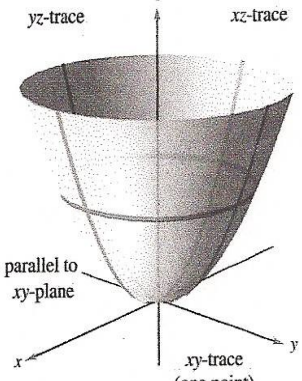
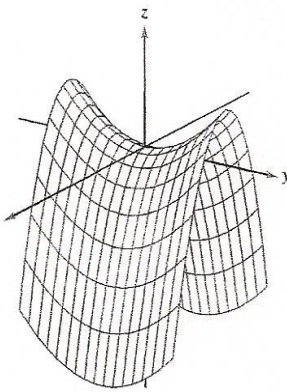
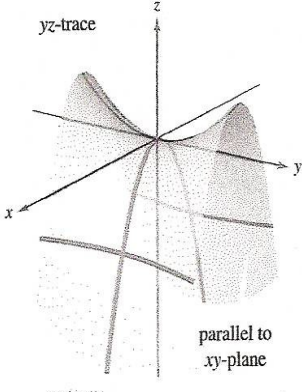
	<p style="text-align: center;">Ellipsoid</p> $\frac{x^2}{a^2} + \frac{y^2}{b^2} + \frac{z^2}{c^2} = 1$ <table border="0" style="width: 100%;"> <thead> <tr> <th style="text-align: left; border-bottom: 1px solid black;"><i>Trace</i></th> <th style="text-align: left; border-bottom: 1px solid black;"><i>Plane</i></th> </tr> </thead> <tbody> <tr> <td>Ellipse</td> <td>Parallel to <i>xy</i>-plane</td> </tr> <tr> <td>Ellipse</td> <td>Parallel to <i>xz</i>-plane</td> </tr> <tr> <td>Ellipse</td> <td>Parallel to <i>yz</i>-plane</td> </tr> </tbody> </table> <p>The surface is a sphere if $a = b = c \neq 0$.</p>	<i>Trace</i>	<i>Plane</i>	Ellipse	Parallel to <i>xy</i> -plane	Ellipse	Parallel to <i>xz</i> -plane	Ellipse	Parallel to <i>yz</i> -plane	
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	<p style="text-align: center;">Elliptic Cone</p> $\frac{x^2}{a^2} + \frac{y^2}{b^2} - \frac{z^2}{c^2} = 0$ <table border="0"> <thead> <tr> <th style="text-align: left;"><u>Trace</u></th> <th style="text-align: left;"><u>Plane</u></th> </tr> </thead> <tbody> <tr> <td>Ellipse</td> <td>Parallel to <i>xy</i>-plane</td> </tr> <tr> <td>Hyperbola</td> <td>Parallel to <i>xz</i>-plane</td> </tr> <tr> <td>Hyperbola</td> <td>Parallel to <i>yz</i>-plane</td> </tr> </tbody> </table> <p>The axis of the cone corresponds to the variable whose coefficient is negative. The traces in the coordinate planes parallel to this axis are intersecting lines.</p>	<u>Trace</u>	<u>Plane</u>	Ellipse	Parallel to <i>xy</i> -plane	Hyperbola	Parallel to <i>xz</i> -plane	Hyperbola	Parallel to <i>yz</i> -plane	
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