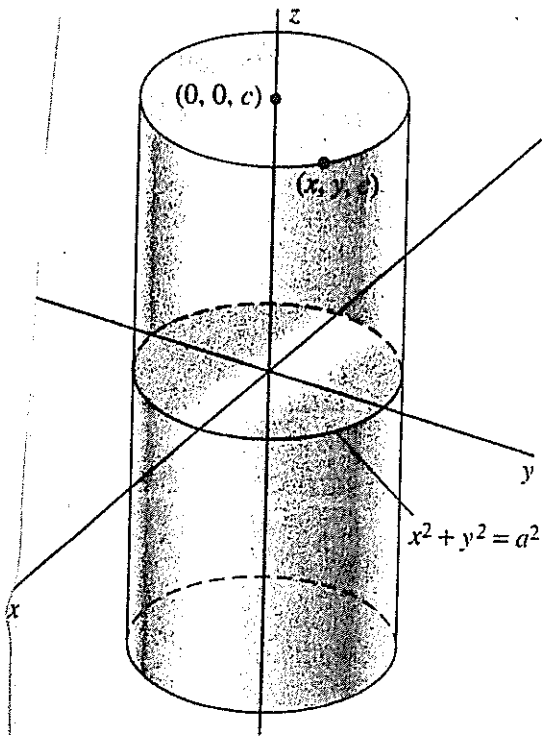
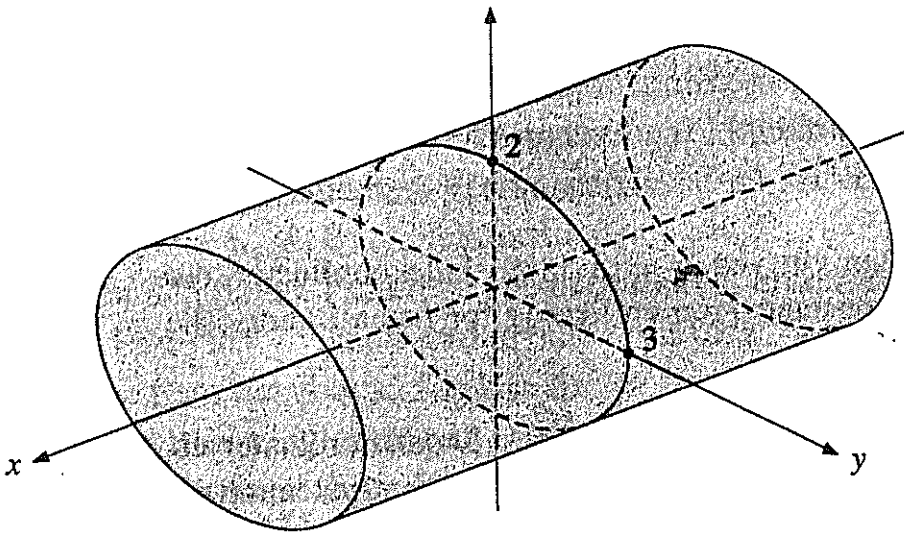
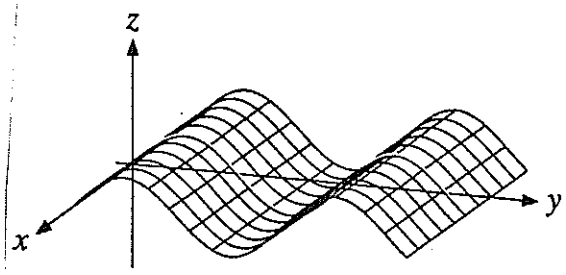



$$\frac{y^2}{3^2} + \frac{z^2}{2^2} = 1$$




$z = \sin y$

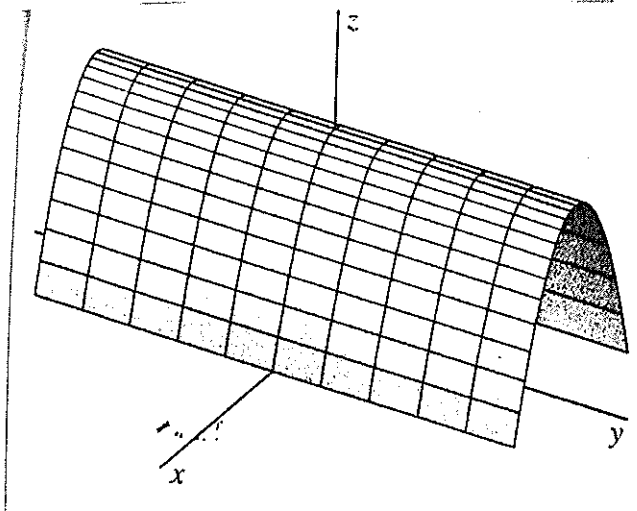
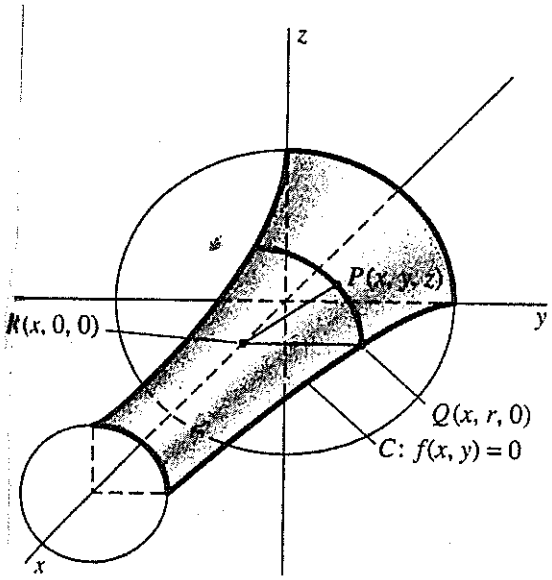
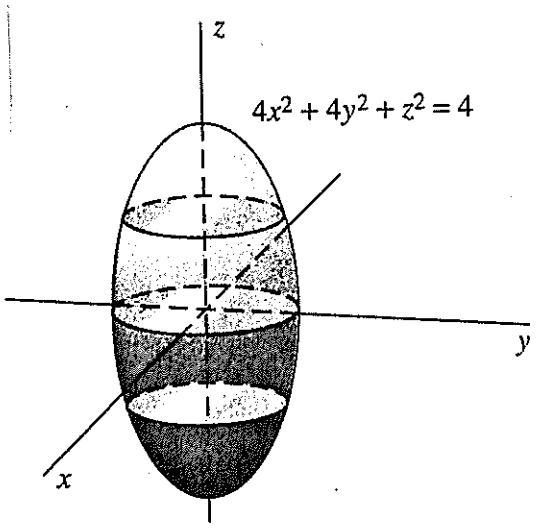



**FIGURE 12.7.8** The parabolic cylinder $z = 4 - x^2$ (Example 5).




S. 832 - 833

s. 831-835

Finn likningen for ellipsoiden man får ved å rotere ellipsen $4y^2 + z^2 = 4$ om z-aksen.

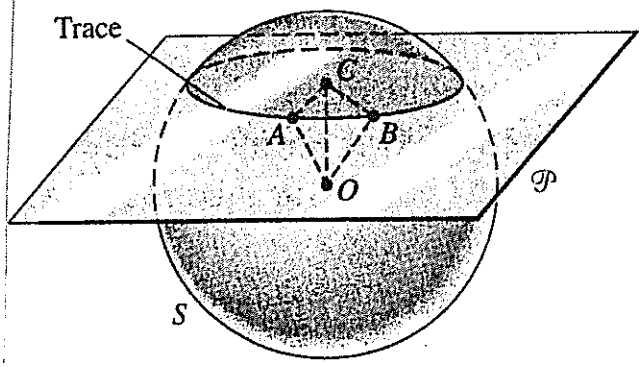



**FIGURE 12.7.1** The intersection of the sphere $S$ and the plane $\mathcal{P}$ is a circle.

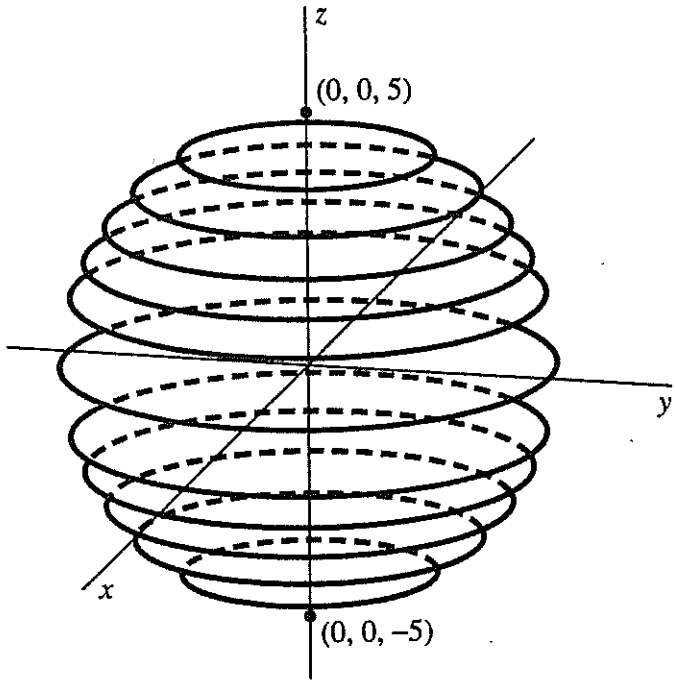



**FIGURE 12.7.2** A sphere as a union of circles (and two points).

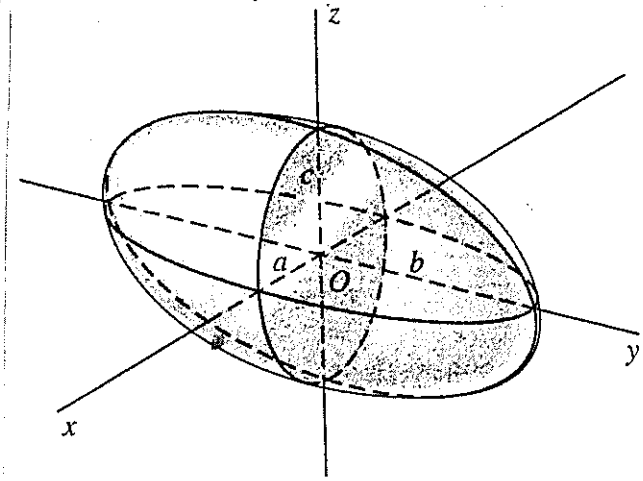



**FIGURE 12.7.12** The ellipsoid of Example 8.

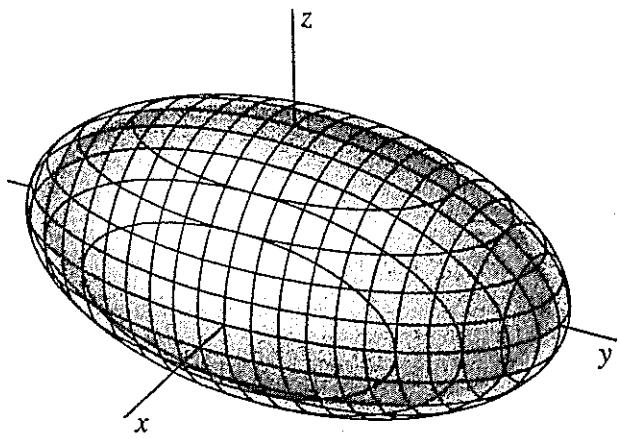
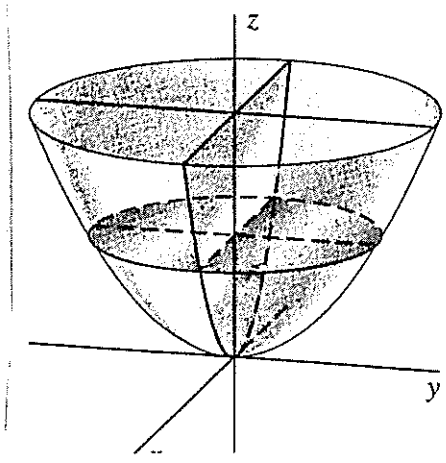
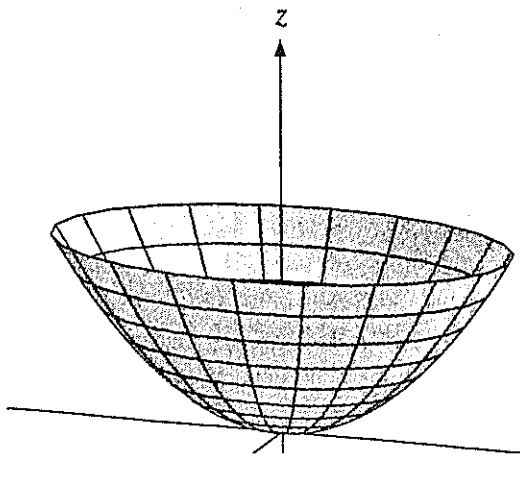
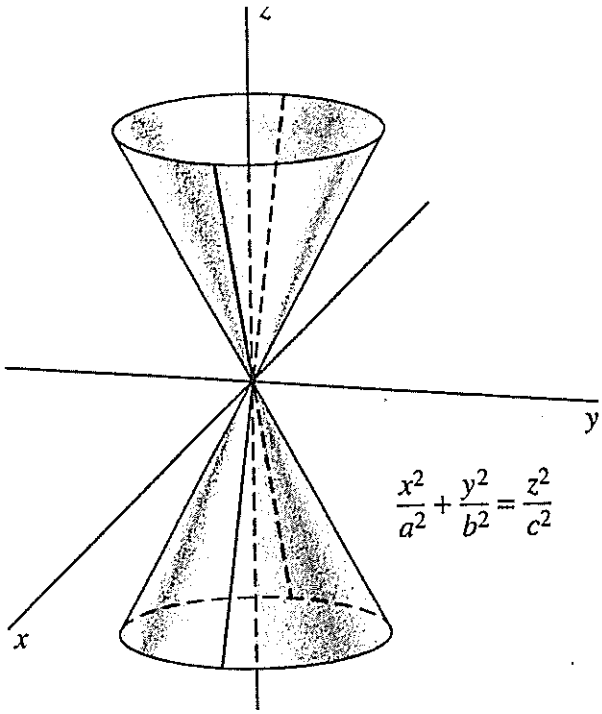



**FIGURE 12.7.13** The traces of the ellipsoid $\frac{x^2}{a^2} + \frac{y^2}{b^2} + \frac{z^2}{c^2}$ (Example 8).

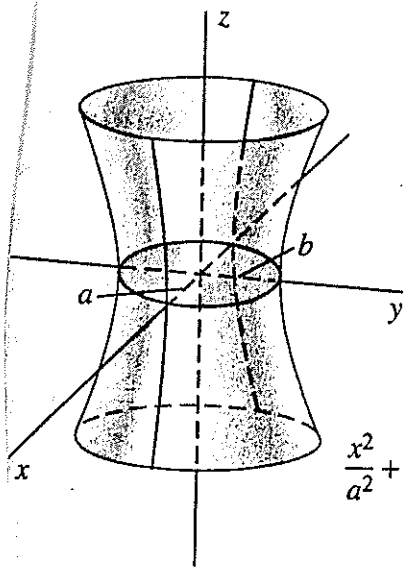


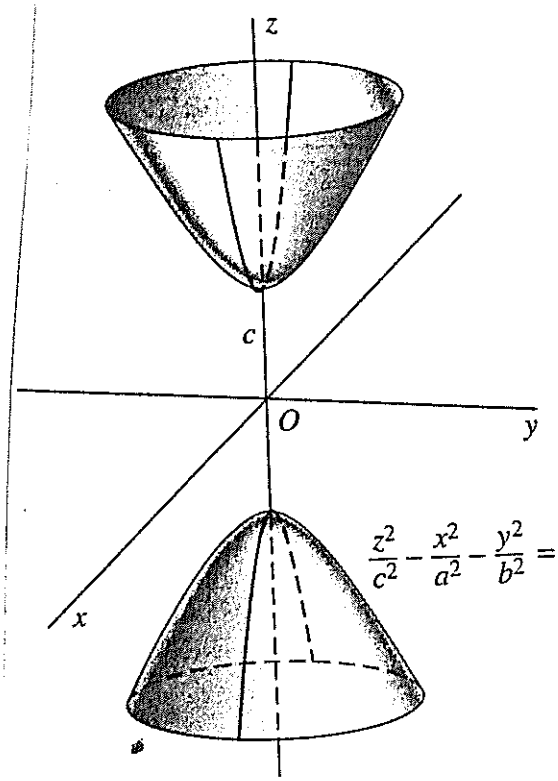
S. 835-836



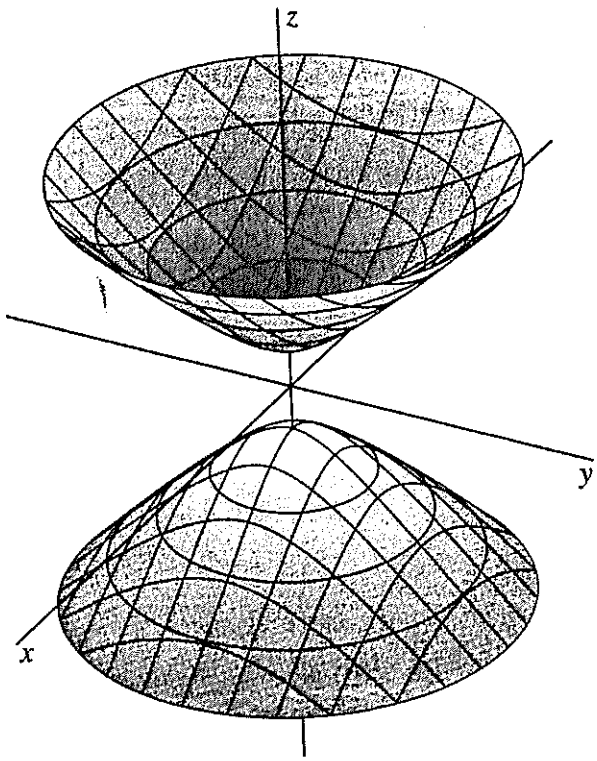

$$\frac{x^2}{a^2}+\frac{y^2}{b^2}=\frac{z^2}{c^2}$$

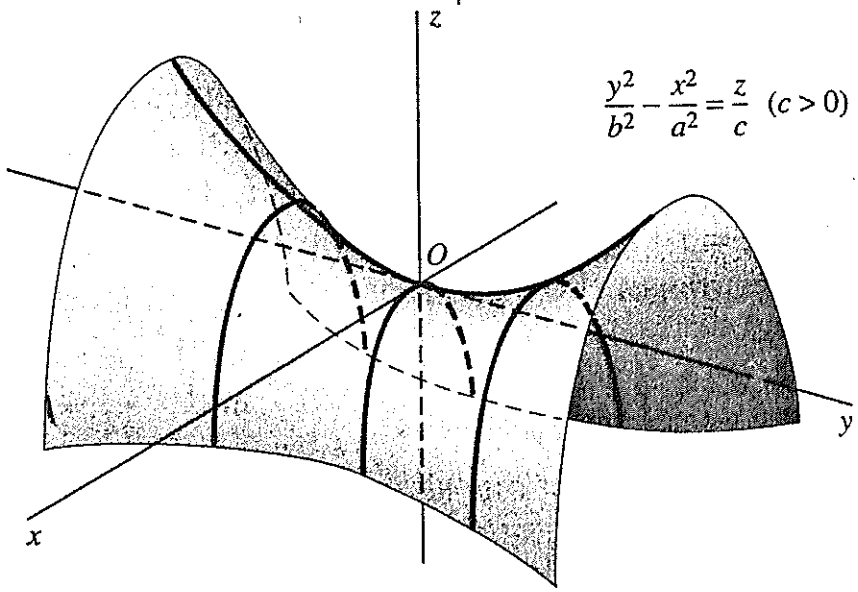



$$\frac{x^2}{a^2}+\frac{y^2}{b^2}-\frac{z^2}{c^2}=1$$

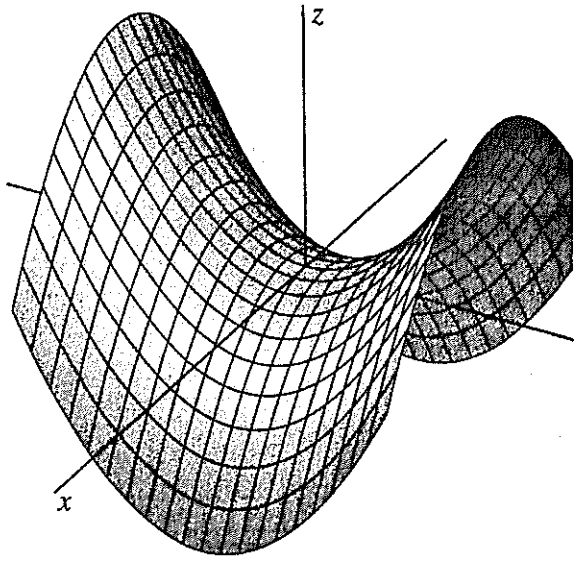


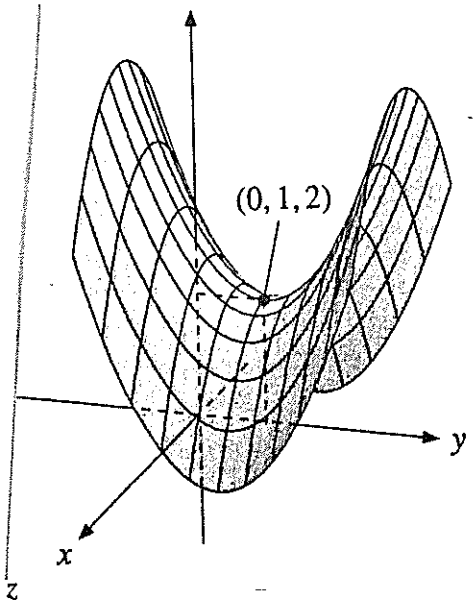

$$\frac{z^2}{c^2}-\frac{x^2}{a^2}-\frac{y^2}{b^2}=1$$




$$\frac{y^2}{b^2}-\frac{x^2}{a^2}=\frac{z}{c}\quad (c>0)$$





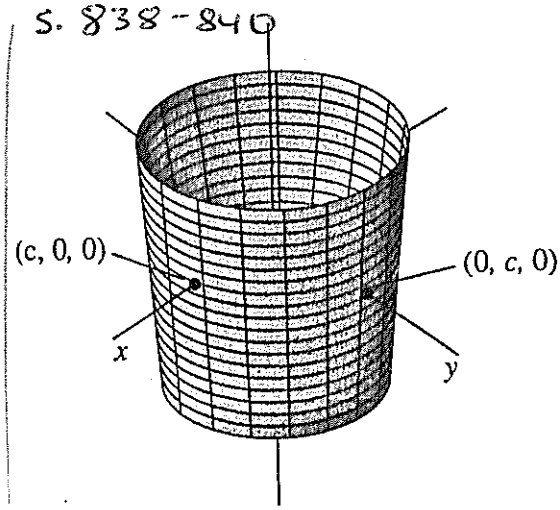




**FIGURE 12.8.3** The cylinder $r = c$.

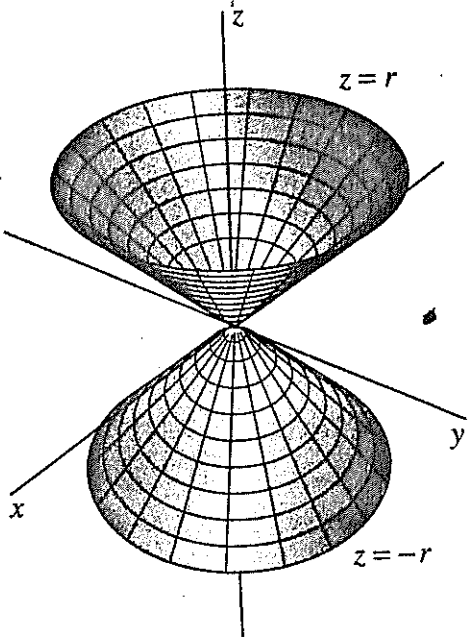



**FIGURE 12.8.4** The cone $z^2 = r^2$.

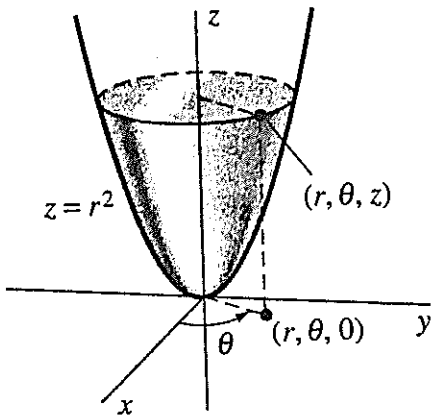



**FIGURE 12.8.5** The paraboloid $z = r^2$.

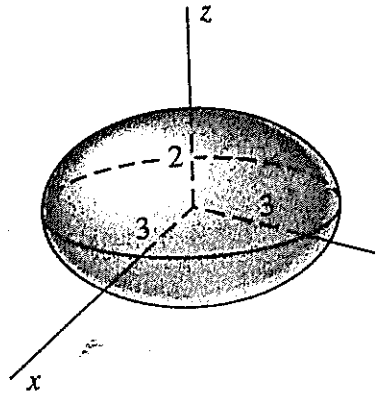
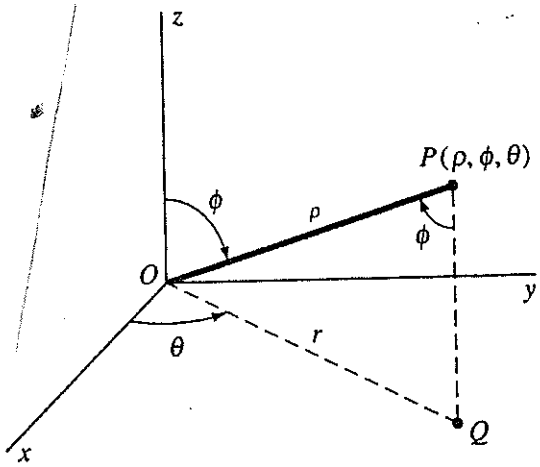
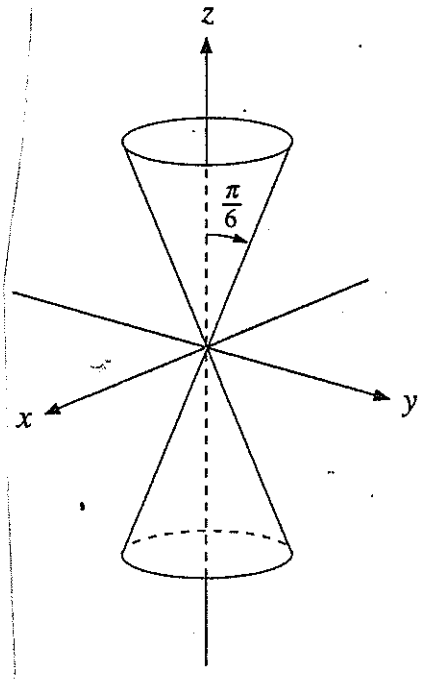



**FIGURE 12.8.6** The ellipsoid $\frac{r^2}{9} + \frac{z^2}{4} = 1$.



s. 842-843

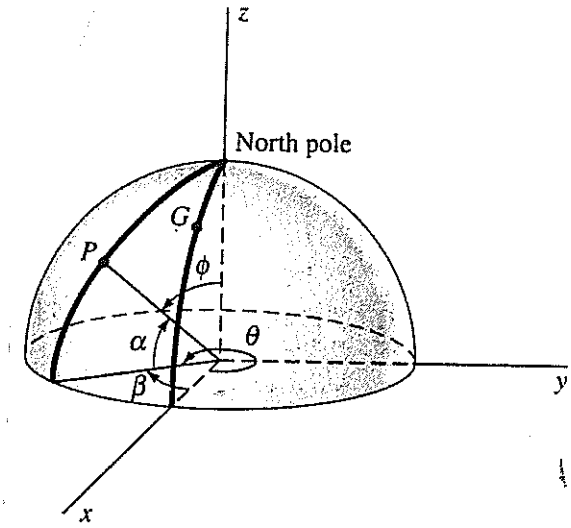



**FIGURE 12.8.12** The relations among latitude, longitude, and spherical coordinates.

Finn avstanden (langs jordoverflata) mellom New York og London.

NY : (40,75° N, 74° W)

L : (51.5° N, 0° )