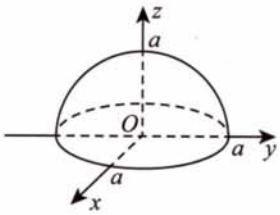
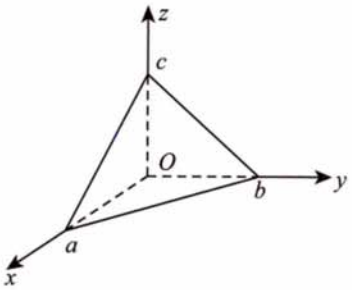
附录3 常用空间图形

(1)



$z=\sqrt{a^2-x^2-y^2}$, $a>0$

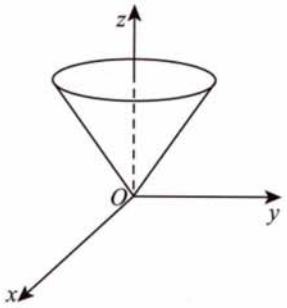
(2)



$\frac{x}{a}+\frac{y}{b}+\frac{z}{c}=1$, a, b, $c>0$,

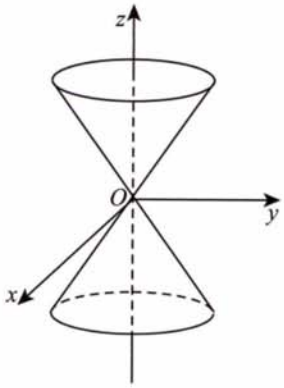
x, y, $z\geqslant 0$

(3)



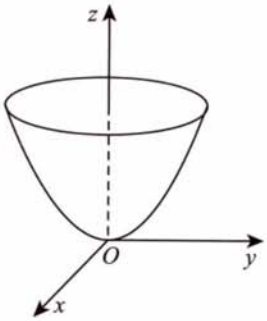
$z=\sqrt{x^2+y^2}$

(4)



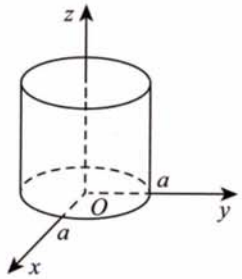
$x^2+y^2=z^2$

(5)



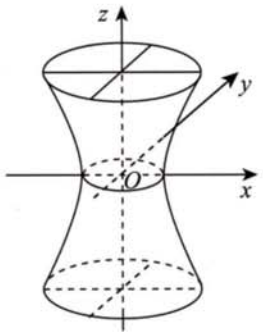
$z=x^2+y^2$

(6)



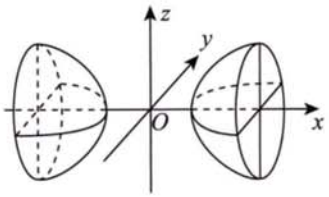
$x^2+y^2=a^2$, $z\geqslant 0$, $a>0$

(7)



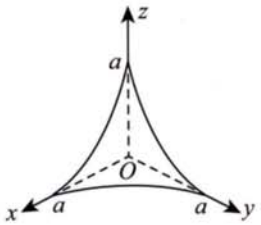
$$\frac{x^2}{a^2}+\frac{y^2}{b^2}-\frac{z^2}{c^2}=1$$

(8)



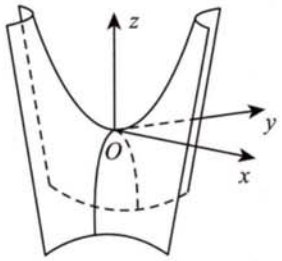
$$\frac{x^2}{a^2}-\frac{y^2}{b^2}-\frac{z^2}{c^2}=1$$

(9)



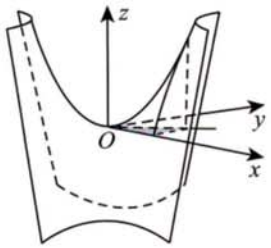
$$\sqrt{x}+\sqrt{y}+\sqrt{z}=\sqrt{a},\ a>0$$

(10)



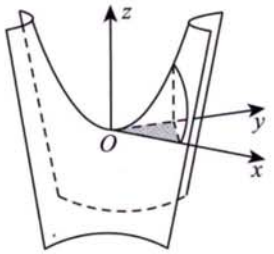
$$z=xy$$

(11)



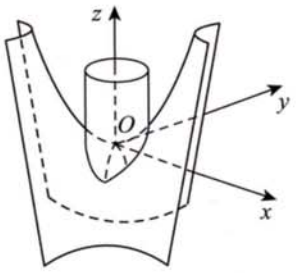
$$\begin{cases} z=xy, \\ y=x, \\ x=1, \\ z=0 \end{cases}$$

(12)



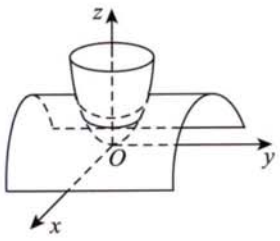
$$\begin{cases} z=xy, \\ x+y=1, \\ z=0 \end{cases}$$

(13)



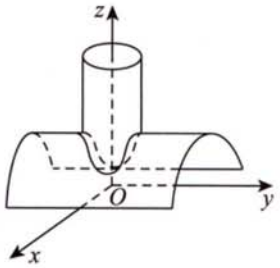
$$\begin{cases} z=xy, \\ x^2+y^2=a^2(a>0) \end{cases}$$

(14)



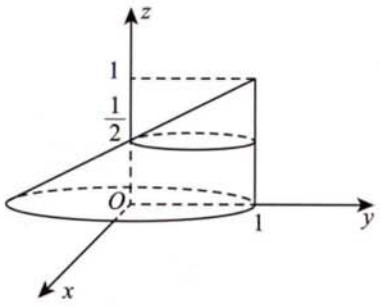
$$\begin{cases} z=x^2+y^2, \\ z=1-x^2 \end{cases}$$

(15)



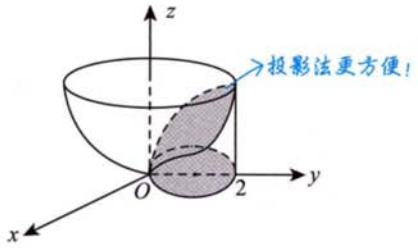
$$\begin{cases} x^2+y^2=1, \\ z=1-x^2 \end{cases}$$

(16)



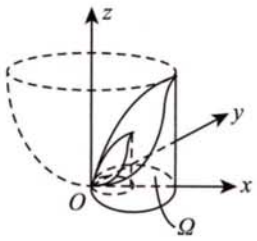
$$x^2+(y-z)^2=(1-z)^2,\ 0\leqslant z\leqslant 1$$

(17)



$$\begin{cases} z=x^2+y^2, \\ x^2+(y-1)^2=1 \end{cases}$$

(18)



$$\begin{cases} z=2(x^2+y^2), \\ x^2+y^2=x, \\ x^2+y^2=2x, \\ z=0 \end{cases}$$