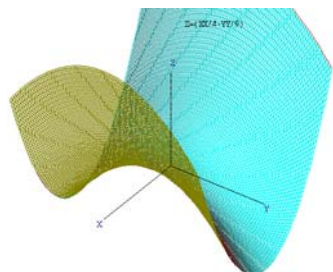
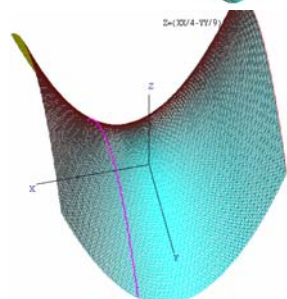


二次曲面-雙曲拋物面(馬鞍面)



$$z = \frac{x^2}{4} - \frac{y^2}{9}$$

XX/4-YY/9

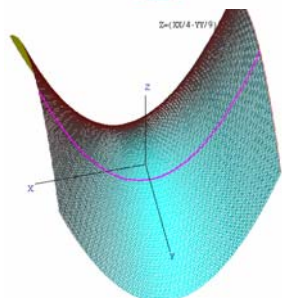


$$(1) \begin{cases} z = \frac{x^2}{4} - \frac{y^2}{9} \\ x = 2 \end{cases}$$

$$\Rightarrow (z-1) = -\frac{y^2}{9}$$

$$\Rightarrow x = 2, y = t, z = -\frac{t^2}{9} + 1$$

2,T,-TT/9+1

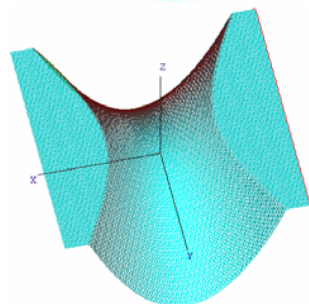


$$(2) \begin{cases} z = \frac{x^2}{4} - \frac{y^2}{9} \\ y = 1 \end{cases}$$

$$\Rightarrow (z + \frac{1}{9}) = \frac{x^2}{4}$$

$$\Rightarrow x = t, y = 1, z = \frac{t^2}{4} - \frac{1}{9}$$

T,1,TT/4-1/9



$$(3) \begin{cases} z = \frac{x^2}{4} - \frac{y^2}{9} \\ z = 2 \end{cases}$$

$$\Rightarrow \frac{x^2}{4} - \frac{y^2}{9} = 2$$

$$\Rightarrow x = \sqrt{8} \sec t, y = \sqrt{18} \tan t, z = 2$$

(XX/4-YY/9)ZDN(2)

SQRT(8)SECT,SQRT(18)TANT,2