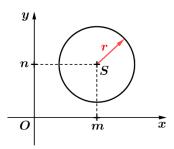
# KUŽELOSEČKY

### KRUŽNICE

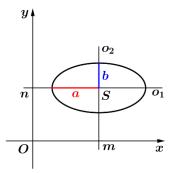
$$(x-m)^2 + (y-n)^2 = r^2$$



 $S[m, n] \dots$  střed kružnice  $r \dots$  poloměr kružnice

#### **ELIPSA**

$$\frac{(x-m)^2}{a^2} + \frac{(y-n)^2}{b^2} = 1$$

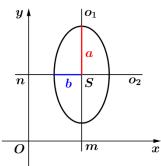


S[m, n] ... střed elipsy

o<sub>1</sub> ... hlavní osa elipsy

o<sub>2</sub> ... vedlejší osa elipsy

$$\frac{(x-m)^2}{b^2} + \frac{(y-n)^2}{a^2} = 1$$



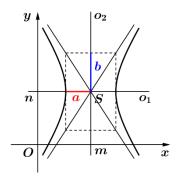
a ... délka hlavní poloosy

b ... délka vedlejší poloosy

a > b

#### **Hyperbola**

$$\frac{(x-m)^2}{a^2} - \frac{(y-n)^2}{b^2} = 1$$

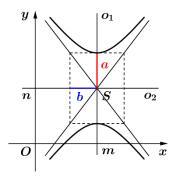


S[m, n] ... střed hyperboly

o<sub>1</sub> ... hlavní osa hyperboly

o<sub>2</sub> ... vedlejší osa hyperboly

$$\frac{(y-n)^2}{a^2} - \frac{(x-m)^2}{b^2} = 1$$

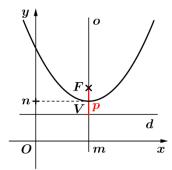


a ... délka hlavní poloosy

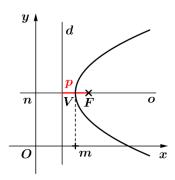
b ... délka vedlejší poloosy

## **PARABOLA**

$$(x-m)^2 = 2p(y-n)$$



$$(y-n)^2 = 2p(x-m)$$

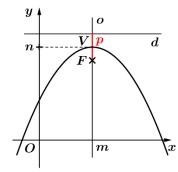


 $V[m, n] \dots$  vrchol paraboly

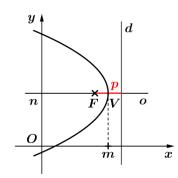
o ... osa paraboly

d ... řídící přímka

$$(x-m)^2 = -2p(y-n)$$



$$(y-n)^2 = -2p(x-m)$$



F ... ohnisko paraboly

p ... parametr