

LA CIRCUNFERENCIA

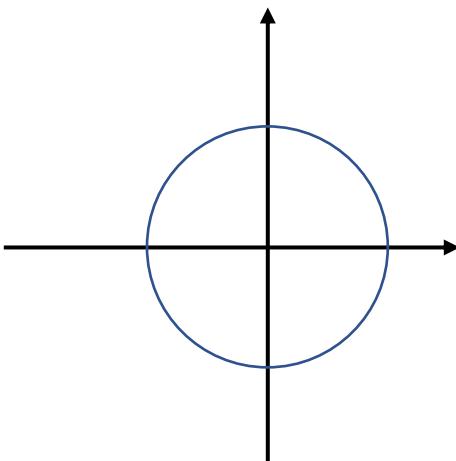
$$\text{FORMULA : } X^2 + y^2 = r^2$$

Circunferencia con centro en **(0,0)** y radio **r**

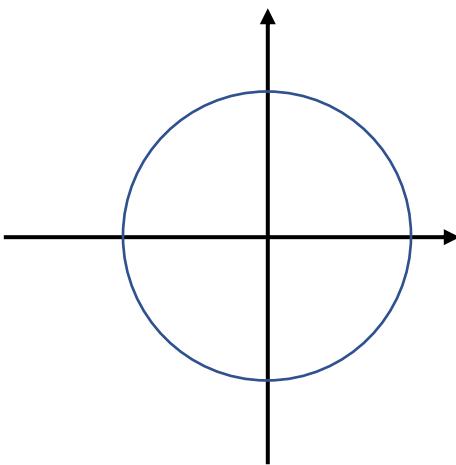
$$(X-h)^2 + (y -k)^2 = r^2$$

Circunferencia con centro en **(h,k)** y radio **r**

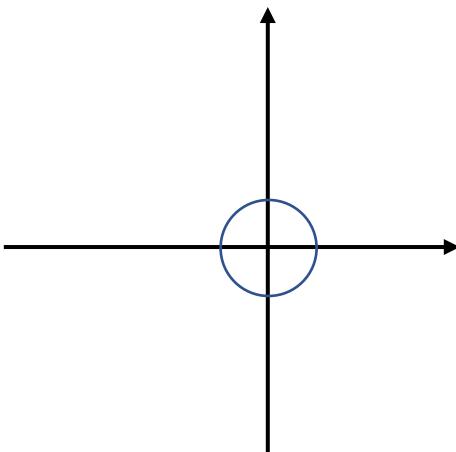
$$X^2 + y^2 = 25$$



$$X^2 + y^2 = 36$$

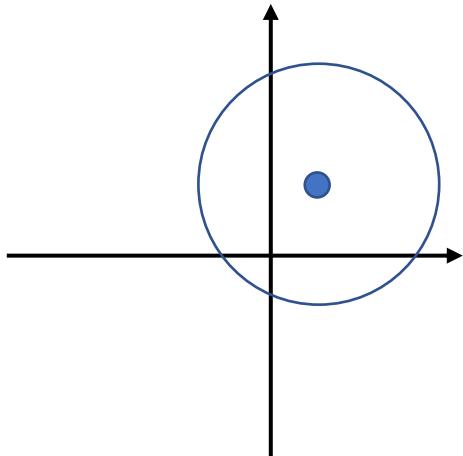


$$X^2 + y^2 = 4$$

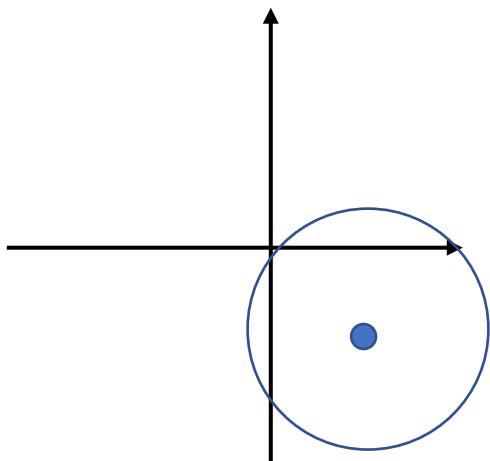


$$(X-2)^2 + (y -3)^2 = 25$$

C(2,3)



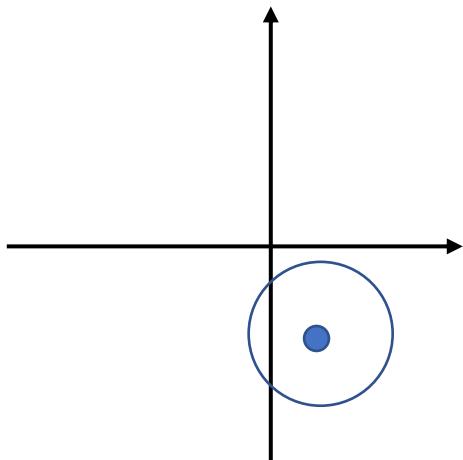
$$(X-4)^2 + (y + 5)^2 = 25$$



$$(X-1)^2 + (y + 5)^2 = 9$$

centro (1,-5)

radio 3



EJERCICIOS DE CIRCUNFERENCIA

$$(X-4)^2 + (y + 5)^2 = 25$$

$$(X+2)^2 + y^2 = 4$$

centro (-2,0)

$$X^2 + (y - 3)^2 = 1$$

$$X-6)^2 + (y + 6)^2 = 25$$

$$X^2 + (y - 7)^2 = 14$$

$$(X-1)^2 + (y + 1)^2 = 4 \quad \text{centro (1,-1)}$$

$$(X-4)^2 + y^2 = 100$$

ELIPSE

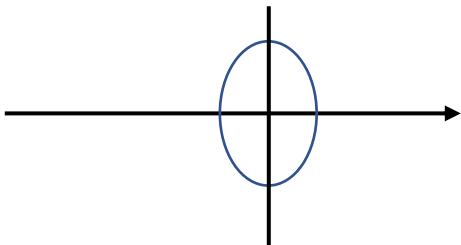
FORMULA $\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$

Elipse con centro en **(0,0)**

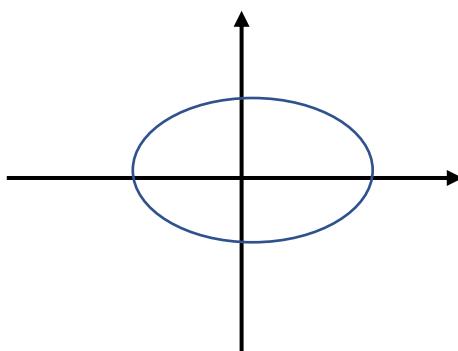
$$\frac{(x-h)^2}{a^2} + \frac{(y-k)^2}{b^2} = 1$$

Elipse con centro en **(h,k)**

$$\frac{x^2}{4} + \frac{y^2}{9} = 1$$

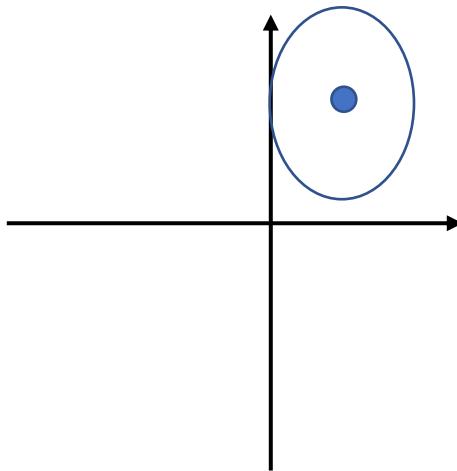


$$\frac{x^2}{25} + \frac{y^2}{9} = 1$$



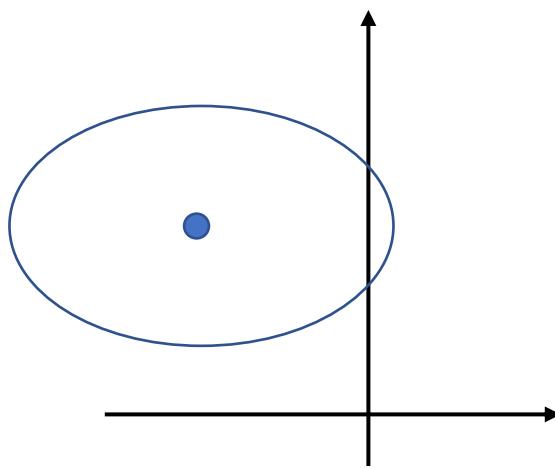
$$\frac{(x-3)^2}{9} + \frac{(y-5)^2}{16} = 1$$

Elipse con centro en **(3,5)**



$$\frac{(x+7)^2}{64} + \frac{(y-8)^2}{25} = 1$$

Elipse con centro en **(-7,8)**



EJERCICIOS DE ELIPSE

$$\frac{y^2}{64} + \frac{x^2}{9} + = 1$$

$$\frac{x^2}{1} + \frac{y^2}{81} + = 1$$

$$\frac{x^2}{36} + \frac{y^2}{9} + = 1$$

$$\frac{(y-3)^2}{16} + \frac{(x-5)^2}{1} = 1$$

$$\frac{x^2}{16} + \frac{(y-5)^2}{16} = 1$$

$$\frac{(y+7)^2}{100} + \frac{(x-8)^2}{25} = 1$$

$$\frac{(x+7)^2}{64} + \frac{y^2}{25} = 1$$

HIPÉRBOLA

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

Hipérbolas con centro en **(0,0)**

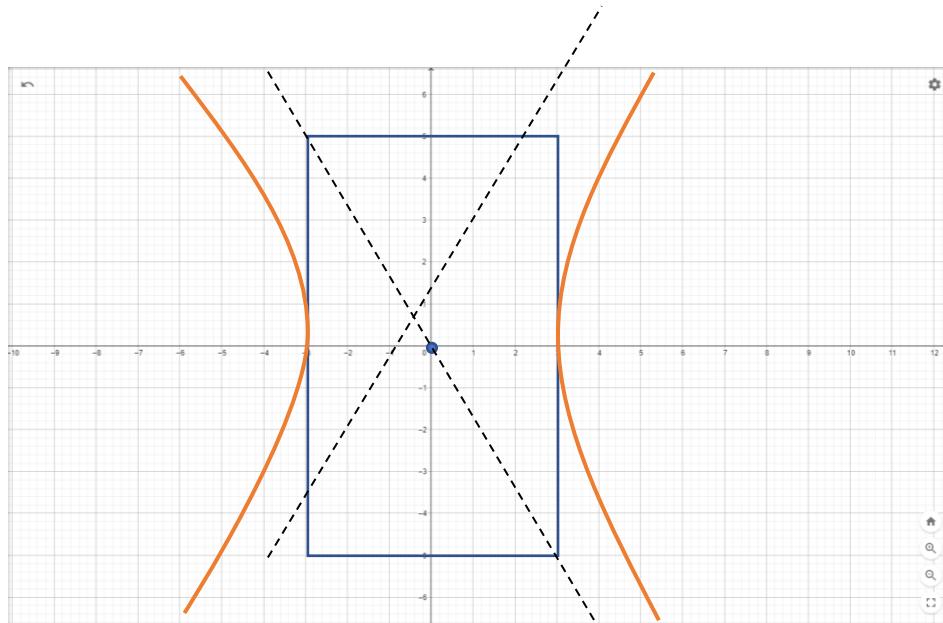
$$\frac{y^2}{a^2} - \frac{x^2}{b^2} = 1$$

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

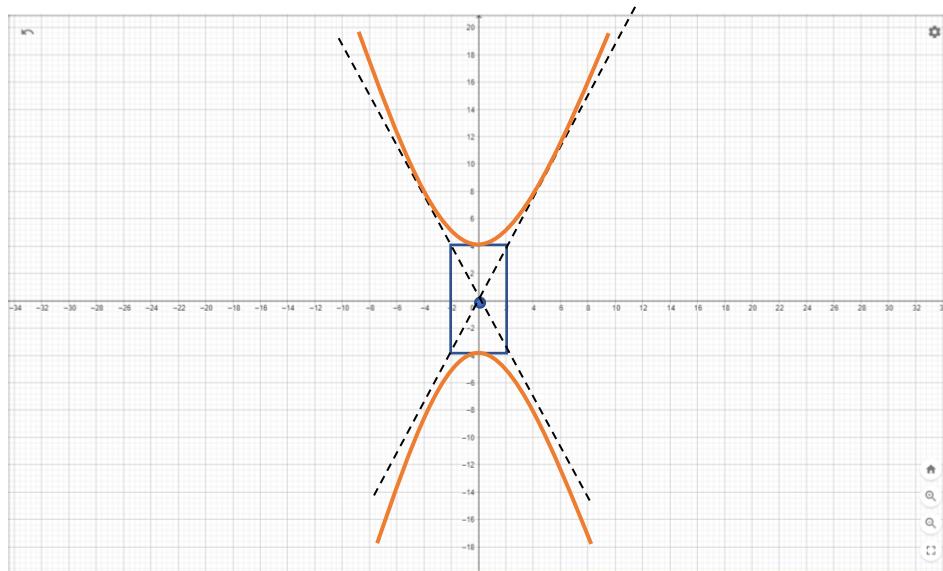
Hipérbolas con centro en **(h,k)**

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

$$\frac{x^2}{9} - \frac{y^2}{25} = 1$$

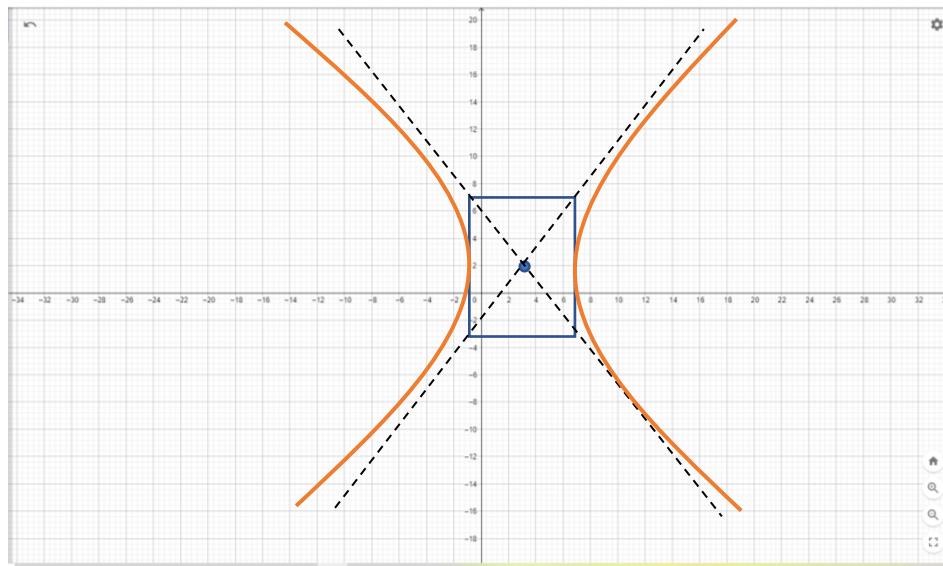


$$\frac{y^2}{16} - \frac{x^2}{4} = 1$$

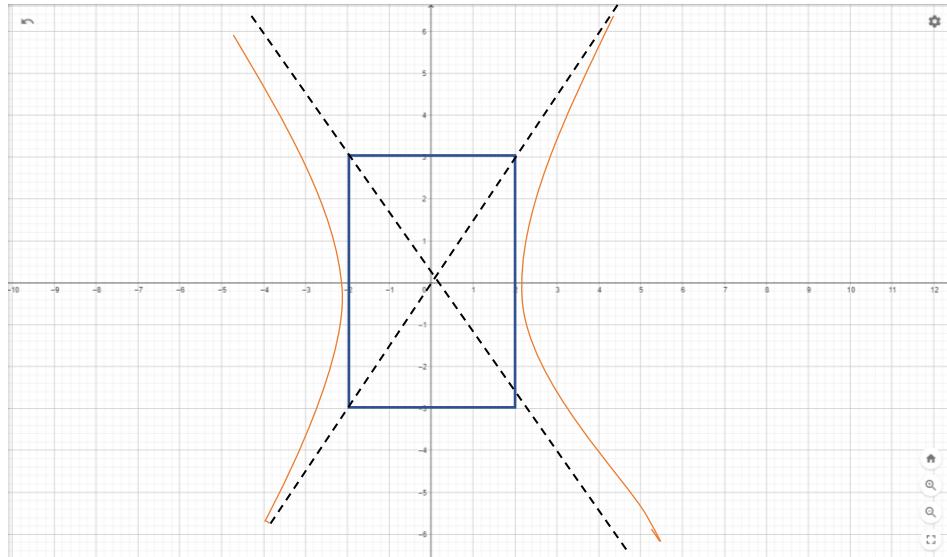


$$\frac{(x-3)^2}{16} - \frac{(y-2)^2}{25} = 1$$

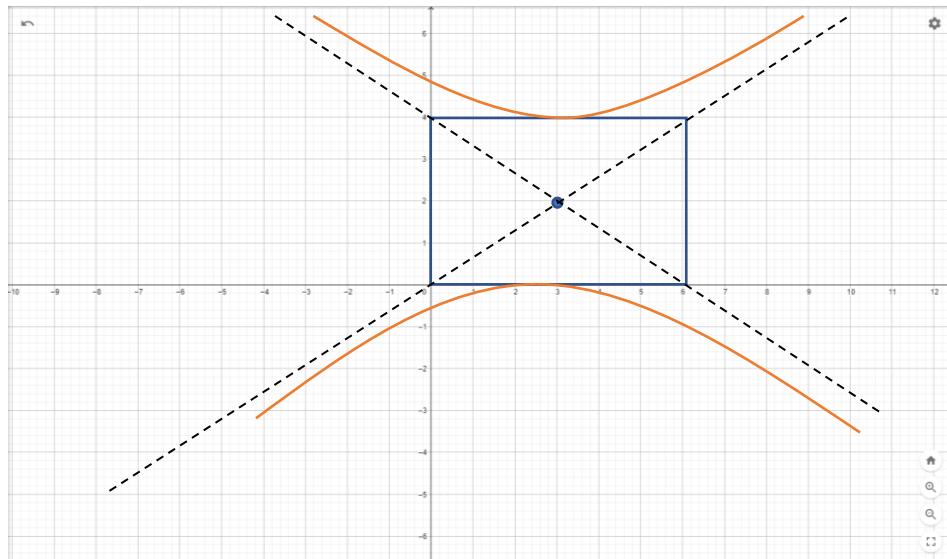
centro (3,2)



$$\frac{x^2}{4} - \frac{y^2}{9} + = 1$$



$$\frac{(y-3)^2}{4} - \frac{(x-2)^2}{9} = 1$$



EJERCICIOS DE HIPERBOLA

$$\frac{x^2}{25} - \frac{y^2}{1} + = 1$$

$$\frac{x^2}{36} - \frac{y^2}{4} + = 1$$

$$\frac{x^2}{1} - \frac{y^2}{16} + = 1$$

$$\frac{(x+1)^2}{16} - \frac{(y+4)^2}{9} = 1$$

$$\frac{(x+3)^2}{36} - \frac{(y-7)^2}{9} = 1$$

$$\frac{(x-1)^2}{16} - \frac{(y+5)^2}{16} = 1$$

$$\frac{(x+5)^2}{9} - \frac{(y+2)^2}{49} = 1$$