

## ESN1 PAG 405

$$F_1(-3;0) \quad F_2(3;0) \rightarrow \text{one focale } x$$

$$P(x;y) \quad PF_1 + PF_2 = 10$$

$$2a = 10 \quad a = 5 \quad c = 3$$

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

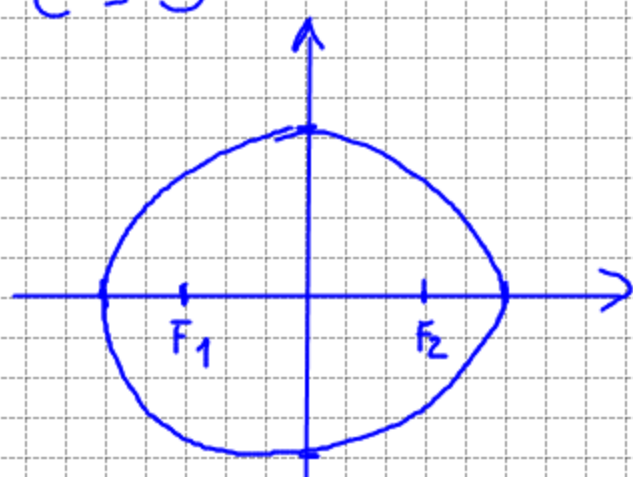
$$F_1(-c;0) \quad F_2(c;0)$$

$$a^2 - c^2 = b^2$$

$$25 - 9 = b^2$$

$$16 = b^2 \quad b = 4$$

$$\boxed{\frac{x^2}{25} + \frac{y^2}{16} = 1}$$



## ESN3

$$P(x;y) \quad A(0;-1) \quad B(0;1) \rightarrow \text{one focale } y$$

$$PA + PB = 12$$

$$12 = 2b \quad b = 6 \quad b^2 - c^2 = a^2 \quad c = 1$$

$$a^2 = 36 - 1 \quad a = \sqrt{35}$$

$$\boxed{\frac{x^2}{35} + \frac{y^2}{36} = 1}$$

## N2

$$F_1(-2;0) \quad F_2(2;0)$$

$$P(x;y) \quad PF_1 + PF_2 = 14$$

$$\sqrt{(x+2)^2 + (y-0)^2} + \sqrt{(x-2)^2 + (y-0)^2} = 14$$

$$\sqrt{x^2 + 4 + 4x + y^2} = 14 - \sqrt{x^2 + 4 - 4x + y^2}$$

$$\sqrt{x^2 + 4 + 4x + y^2} = 14 - \sqrt{x^2 + 4 - 4x + y^2} - 28 \dots$$

$$-8x + 196 = 28\sqrt{x^2 + 4 - 4x + y^2}$$

$$-336x + 64x^2 + 38416 = 784(x^2 + 4 - 4x + y^2)$$

$$\frac{720x^2 + 784y^2 = 35280}{35280 \quad 35280 \quad 35280}$$