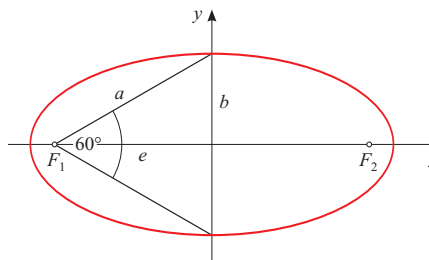


Zadatak 32. Duljina velike osi elipse $b^2x^2 + a^2y^2 = a^2b^2$ jednaka je 12. Kut pod kojim se iz žarišta elipse vidi njezina mala os jednak je 60° . Kako glasi jednadžba elipse?

Rješenje.



$$2a = 12 \implies a = 6$$

$$\alpha = 60^\circ$$

$$\frac{b}{a} = \sin \frac{\alpha}{2}$$

$$b = a \sin \frac{\alpha}{2} = 6 \cdot \sin 30^\circ = 6 \cdot \frac{1}{2} = 3$$

$$E \quad \dots \quad 9x^2 + 36y^2 = 9 \cdot 36 \quad / : 9$$

$$x^2 + 4y^2 = 36$$