Es. N° 42 P. 280

$$3x^2+4y^2+24x-16y+55=0$$

$$3(x^2+8x)+4(y^2-4y)+55=0$$

$$3(x^2+8x+16-16)+4(y^2-4y+4-4)+55=0$$

$$3\left[(x+4)^2-16\right]+4\left[(y-2)^2-4\right]+55=0$$

$$3(x+4)^2-48+4(y-2)^2-16+55=0$$

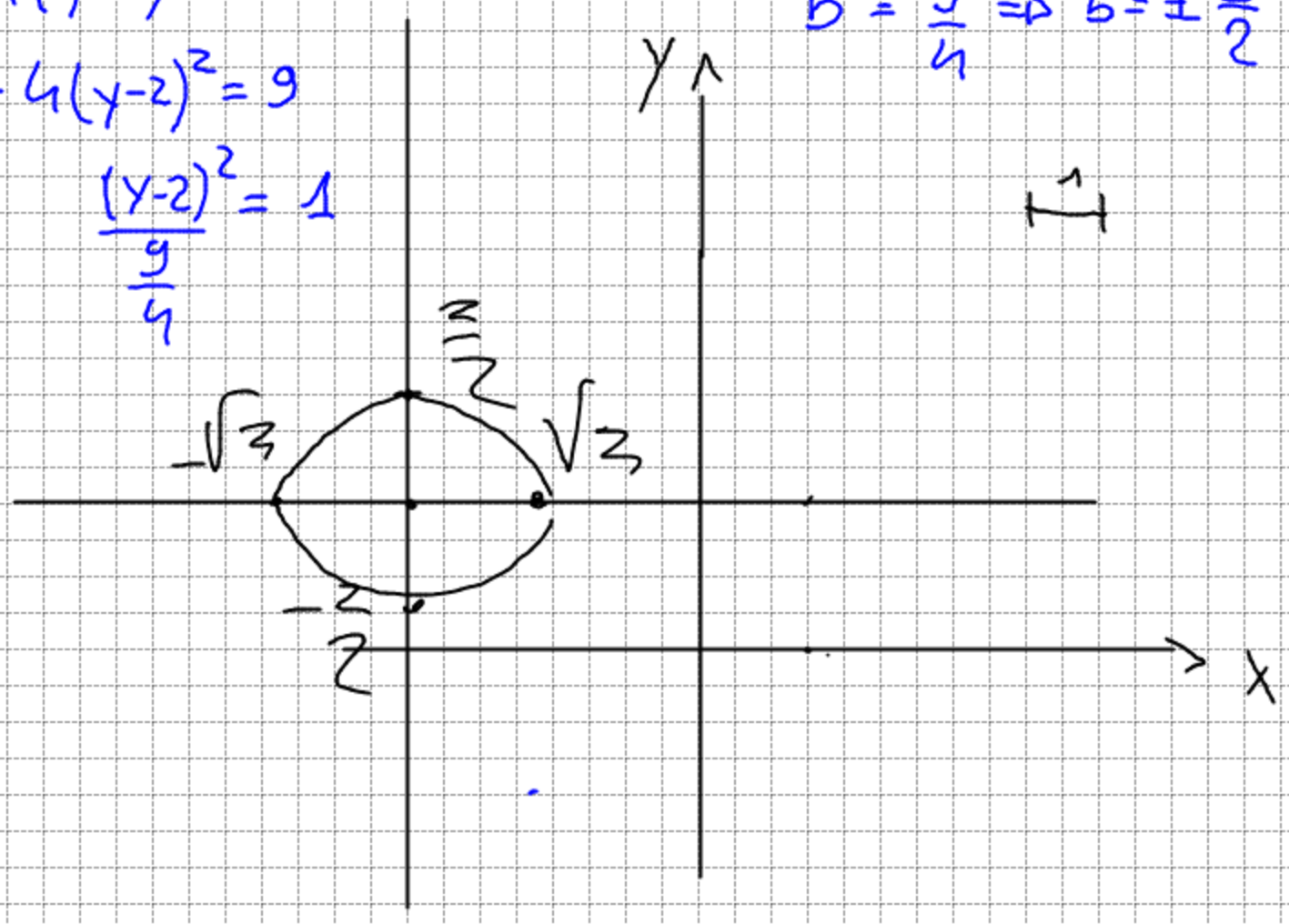
$$3(x+4)^2+4(y-2)^2-9=0$$

$$3(x+4)^2+4(y-2)^2=9$$

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

$a^2=3 \Rightarrow a=\pm\sqrt{3}$

$b^2=\frac{9}{4} \Rightarrow b=\pm\frac{3}{2}$



N° 43)

$$x^2+2y^2-6x+4y+7=0$$

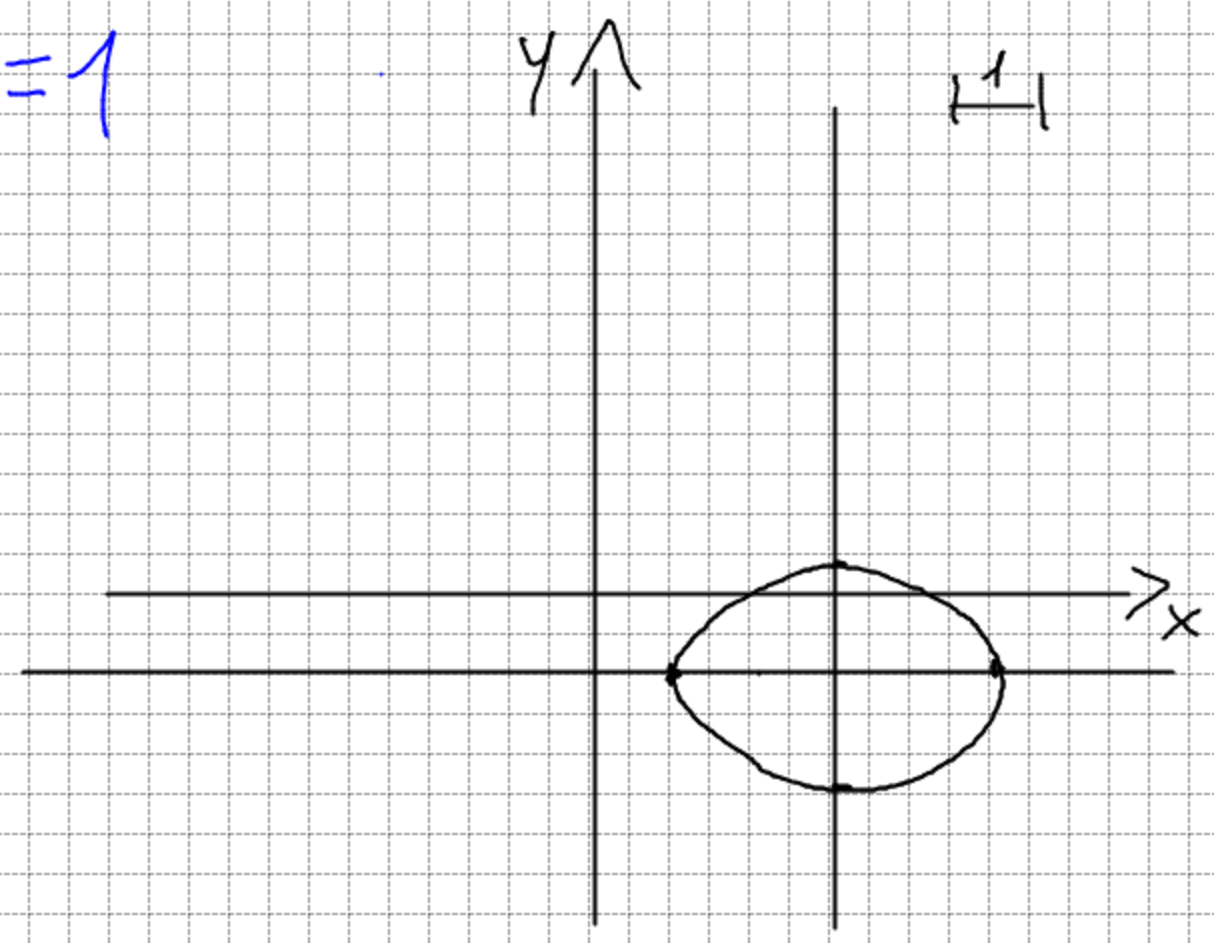
$$(x^2-6x)+2(y^2+2y)+7=0$$

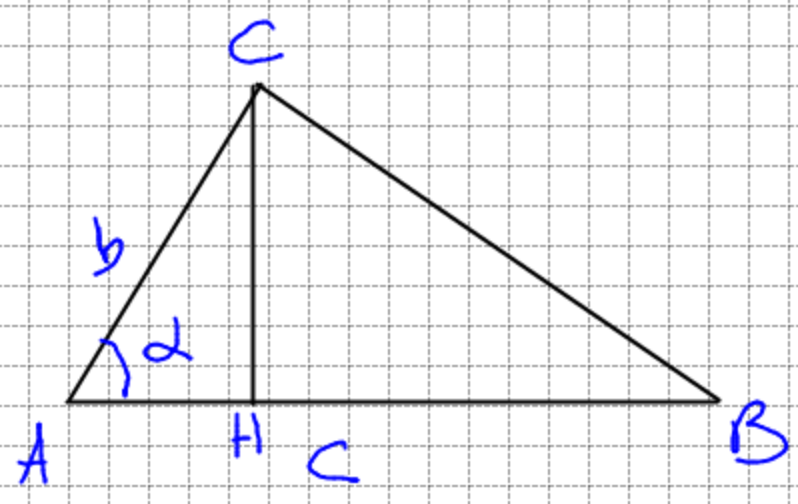
$$\left[(x^2-6x+9)-9\right]+2\left[(y^2+2y+1)-1\right]=-7$$

$$\left[(x-3)^2-9\right]+2\left[(y+1)^2-1\right]=-7$$

$$(x-3)^2-9+2(y+1)^2-2=-7$$

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

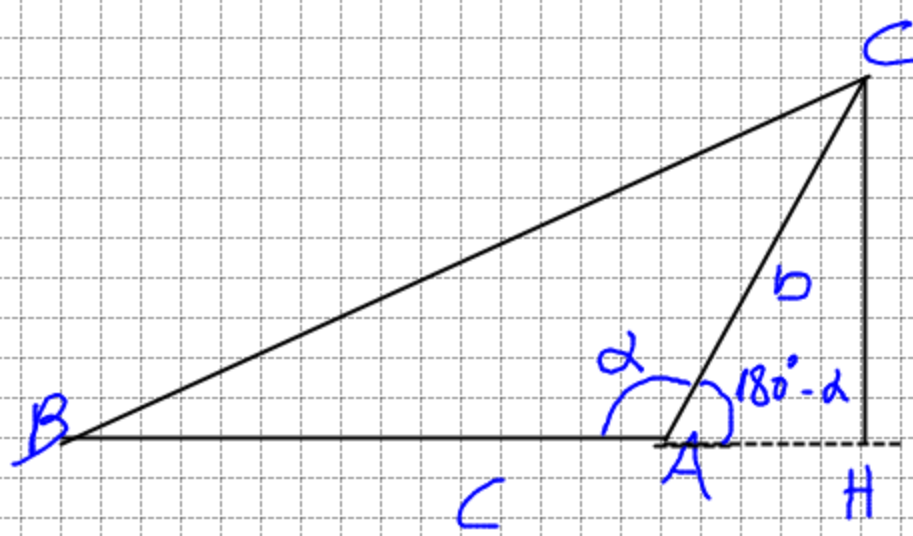




$$0 < \alpha < \frac{\pi}{2}$$

$$\overline{CH} = b \operatorname{sen} \alpha$$

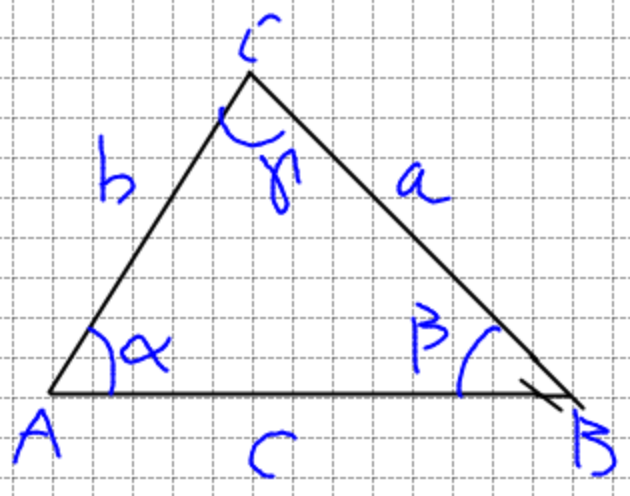
$$Q = \frac{1}{2} c\, b \operatorname{sen} \alpha$$



$$\overline{CH} = b \operatorname{sen}(180° - \alpha)$$

$$\operatorname{sen}(180° - \alpha) = \operatorname{sen} \alpha$$

$$Q = \frac{1}{2} c\, b \operatorname{sen} \alpha$$



$$b = c \cos \alpha + a \cos \gamma$$