AP21110010872

$$f(x,y) = \sqrt{8+8x-4y-4x^2-y^2} = 0$$

$$= 4x^2+y^2-8x+4y-8=0$$

$$4x^2+y^2-8x+4y=8$$

Spitting middle term

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

$$4(x^2-2x+1)+(y^2+4y+4)=8+4(1)+4$$

$$4(x-1)^2+(y+2)^2=16$$

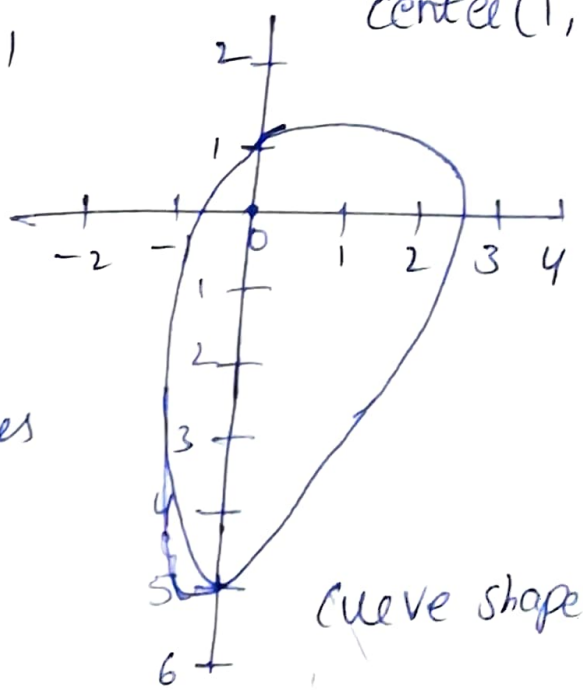
$$\frac{(x-1)^2}{4}+\frac{(y+2)^2}{16}=1 \quad (4,1)$$

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

centre $(1,-2)$

(∵ Because less than 4)

these are the values of c. $(1,-2)$



curve shape