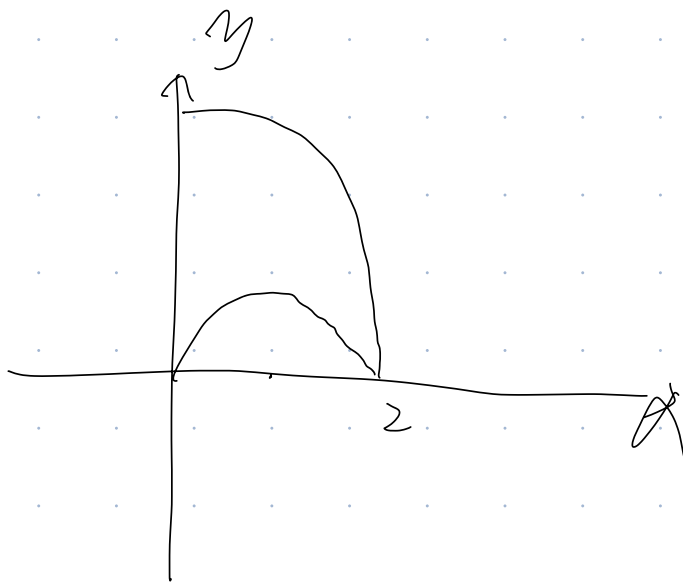


$$\sin \tilde{u} + \sin \tilde{v}$$

$$f(1,1) = 3$$

$$f(x, y) - 3 > 0$$



$$\int_0^2 dx \int_{\sqrt{4-x^2}}^{\sqrt{4-x^2}} f$$

$$2x + x^2$$

$$\theta \in [0, \frac{\pi}{2}]$$

$$r \in [2\cos\theta, 2]$$

$$r = 2\cos\theta$$

$$x^2 + y^2 = 2x$$

$$x^2 + y^2 - 2x + 1 = 1$$

$$x = r\cos\theta$$

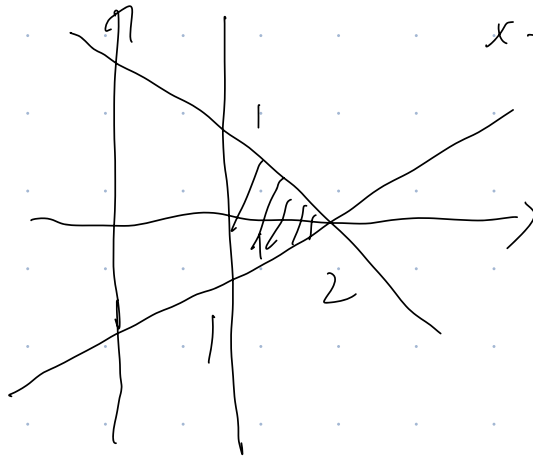
$$y = r\sin\theta$$

$$x^2 + y^2 \leq r^2$$

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

$$y = -x + 2$$

$$x - 2$$



设买到甲、乙、丙产品分别为 B_1, B_2, B_3

设 A 为买到一等品

$$P(A) = P(AB_1) + P(AB_2) + P(AB_3)$$

$$= P(B_1)P(A|B_1) + \\ P(B_2)P(A|B_2) + \\ P(B_3)P(A|B_3)$$

$$= \frac{1}{4} \times 0.02 +$$

$$\frac{1}{4} \times 0.01 +$$

$$\frac{1}{2} \times 0.03 +$$

$$P(B_1|A) = \frac{P(B_1A)}{P(A)}$$

$$= \frac{P(B_1)P(A|B_1)}{\frac{1}{4}}$$