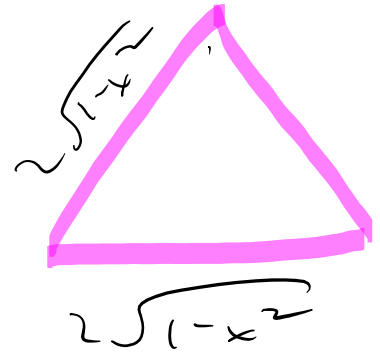
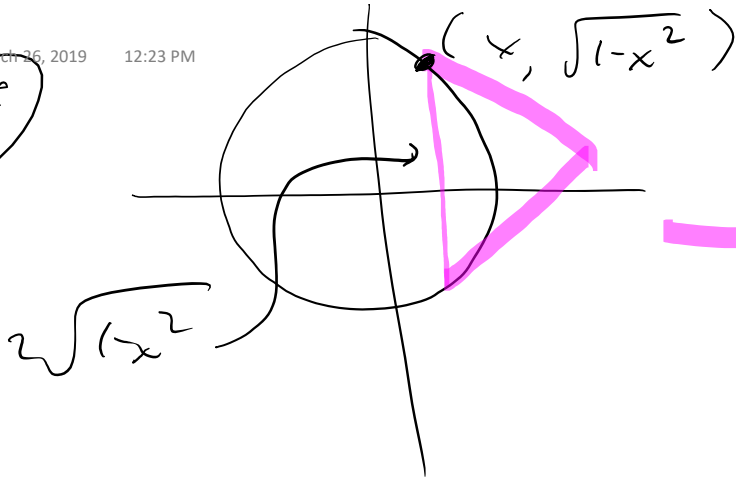


(f)

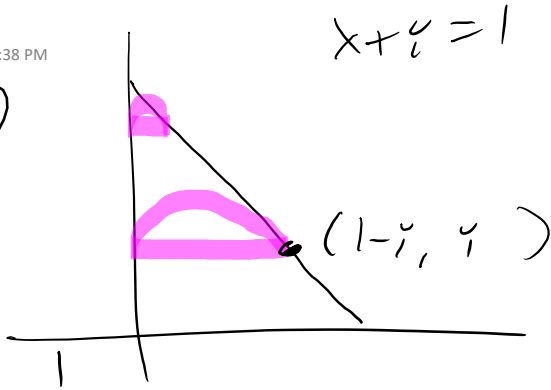


$$\int_{-1}^1 \sqrt{1-x^2} dx$$

$$= 4\sqrt{3}/3$$

$$\begin{aligned} \text{Area} &= \frac{1}{2} ab \sin C \\ &= \frac{1}{2} (4(1-x^2)) \cdot \frac{\sqrt{3}}{2} \\ &= \sqrt{3} (1-x^2) \end{aligned}$$

(10)



$$\text{radius} = \frac{1-y}{2}$$

$$\text{area} = \frac{\pi}{2} \left(\frac{1-y}{2} \right)^2$$

$$\int_0^1 (1-y)^2 dy$$

$$(A1) \quad 1000 + \int_0^3 2000 e^{0.23t} dt$$

$$= 10,141$$

(A2) A

$$P = \frac{2000 e^{0.23t}}{0.23} + \underline{\hspace{10em}}$$