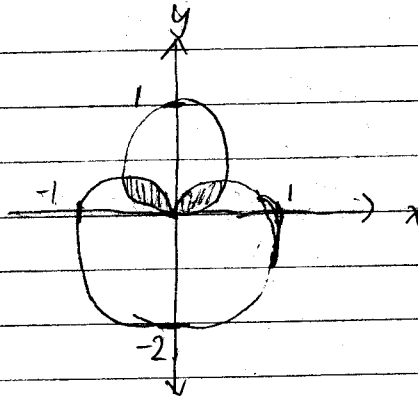
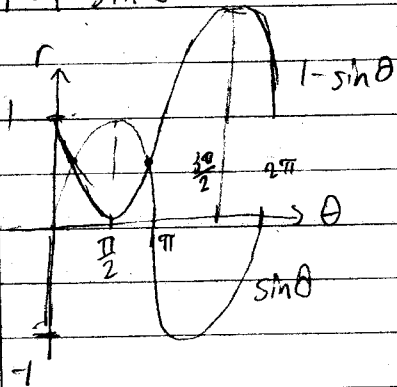


W10 Q2

$$r = 1 - \sin \theta \quad r = \sin \theta$$



$$2 \int_{\pi/6}^{5\pi/6} \int_{\sin \theta}^{1 - \sin \theta} r \, dr \, d\theta$$

$$\begin{aligned} 1 - \sin \theta &= \sin \theta \\ \sin \theta &= \frac{1}{2} \\ \theta &= \frac{\pi}{6} \end{aligned}$$