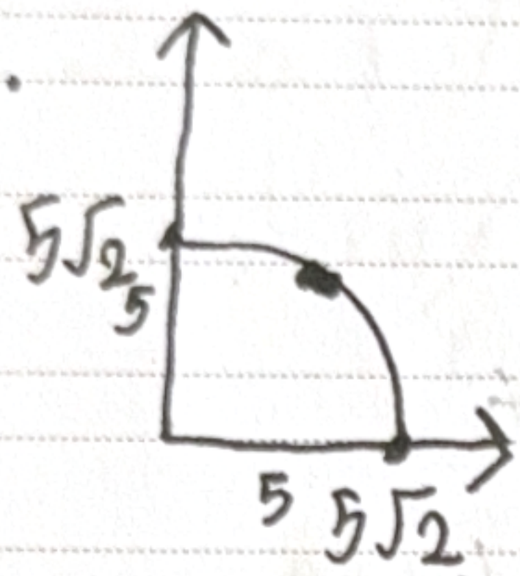
Subject: Session 59

Year. Month. Date. ( )

1.



a) the work along the circle is 0.

$$\int_0^{5\sqrt{2}} x^2\,dx = \frac{x^3}{3}\Big|_0^{5\sqrt{2}} = \frac{250\sqrt{2}}{3}$$

b) the work along the line is 0.

$$\int_0^{\frac{\pi}{4}} 50\cos^2\theta\,d\theta = \frac{25\pi}{4} + \frac{25}{2}$$