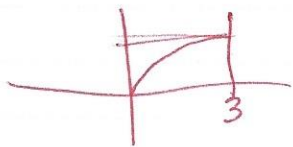


pg. 425 # 13abc, 14, 28, 30, 33, 35-40

13)

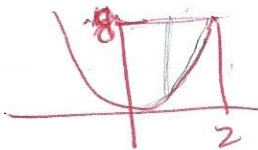


a)  $\pi \int_0^3 (\sqrt{x})^2 dx$

b)  $\pi \int_0^{\sqrt{3}} (y^2)^2 dy$

c)  $\pi \int_0^{\sqrt{3}} (3-y^2)^2 dy$

14)



$y=2x^2$   
 $x=\sqrt{\frac{y}{2}}$

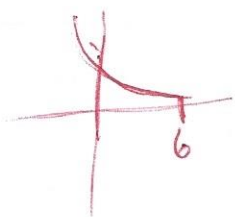
a)  $\pi \int_0^8 \left(\sqrt{\frac{y}{2}}\right)^2 dy$

b)  $\pi \int_0^2 (2x^2)^2 dx$

c)  $\pi \int_0^2 (8-2x^2)^2 dx$

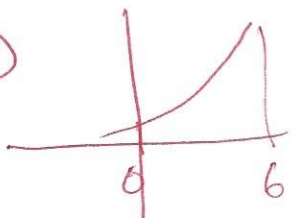
d)  $\pi \int_0^8 \left(2-\sqrt{\frac{y}{2}}\right)^2 dy$

28)



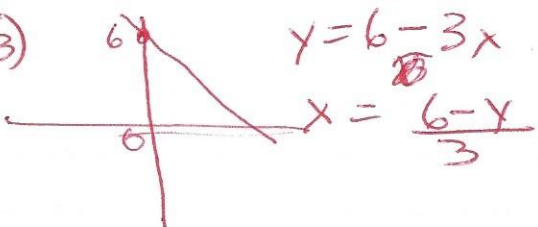
$\pi \int_0^6 \left(\frac{2}{x+1}\right)^2 dx$

30)



$\pi \int_0^6 (e^{x/4})^2 dx$

33)

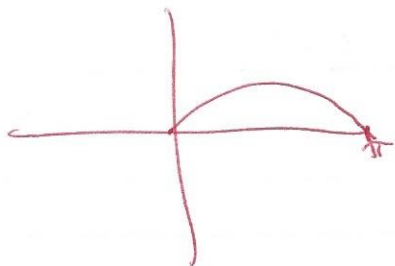


$y=6-3x$

$x=\frac{6-y}{3}$

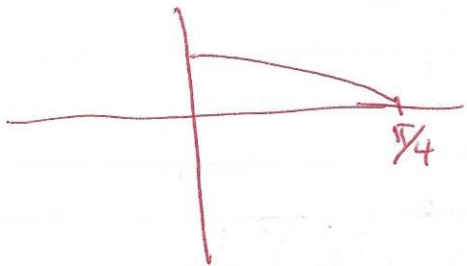
$\pi \int_0^6 \left(\frac{6-y}{3}\right)^2 dy$

35)



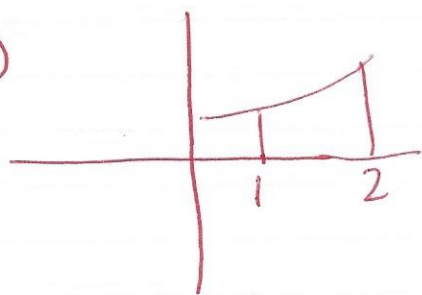
$$\pi \int_0^{\pi} (\sin x)^2 dx$$

36)



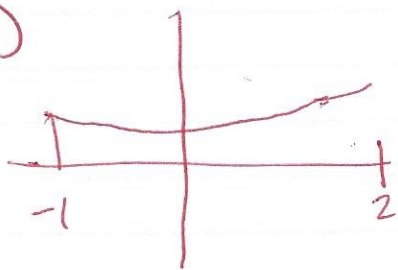
$$\pi \int_0^{\pi/4} (\cos 2x)^2 dx$$

37)



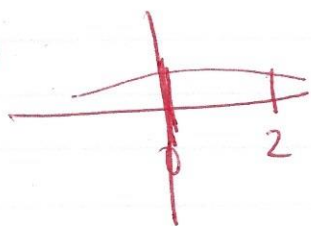
$$\pi \int_1^2 (e^x - 1)^2 dx$$

38)



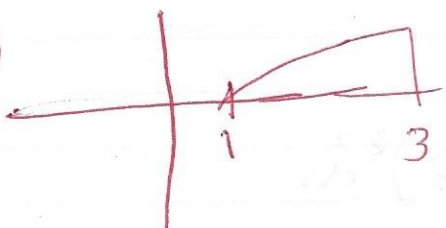
$$\pi \int_{-1}^2 (e^{x/2} + e^{-x/2})^2 dx$$

39)



$$\pi \int_0^2 (e^{-x^2})^2 dx$$

40)



$$\pi \int_1^3 (\ln x)^2 dx$$