

Volumes #5

Area between curves

$$V = \int_a^b 2\pi x (f(x) - g(x)) dx$$

typed on worksheet

Find the volume

1) in the first quadrant enclosed between $y=x$ and $y=x^2$ revolved about the y -axis

2) $y=2x-1$, $y=-2x+3$, $x=2$

3) $y=x$, $y=-\frac{x}{2}$, $x=2$

4) $y=2x-1$, $y=\sqrt{x}$, $x=0$

$$\frac{\pi}{6}$$

$$\frac{20\pi}{3}$$

$$8\pi$$

$$\frac{7\pi}{15}$$

answers to worksheet questions