

Revolution About the x -Axis

Session 57

$$a) \int_0^3 \pi (3x - x^2)^2 dx = \pi \left[3x^3 - \frac{3}{2}x^4 + \frac{1}{5}x^5 \right]_0^3 = 8\pi$$

$$b) \int_0^a \pi a x dx = \frac{\pi a x^2}{2} \Big|_0^a = \frac{\pi a^3}{2}$$