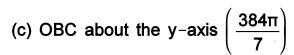
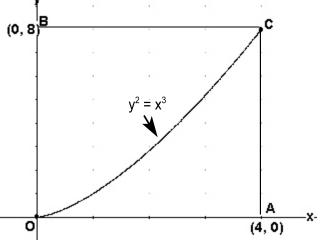
1. Use integration to find the volume of the solid of revolution when the given region is rotated about the given axis.

(use the disc or ring method):

- (a) OAC about the x-axis (64π)
- (b) OBC about the x-axis (192π)



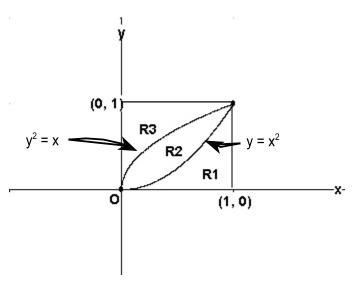
(d) OAC about the y-axis $\left(\frac{512\pi}{7}\right)$



21. Use integration to find the volume of the solid of revolution when the given region is rotated about the given axis.

(use the disc or ring method):

- (a) R1 about the x-axis $\left(\frac{\pi}{5}\right)$
- (b) R2 about the x-axis $\left(\frac{3\pi}{10}\right)$
- (c) R3 about the x-axis $\left(\frac{\pi}{2}\right)$
- (d) R3 about the y-axis $\left(\frac{\pi}{5}\right)$
- (e) R2 about the y-axis $\left(\frac{3\pi}{10}\right)$
- (f) R1 about the y-axis $\left(\frac{\pi}{2}\right)$



Repeat 1 and 2 using the shell method