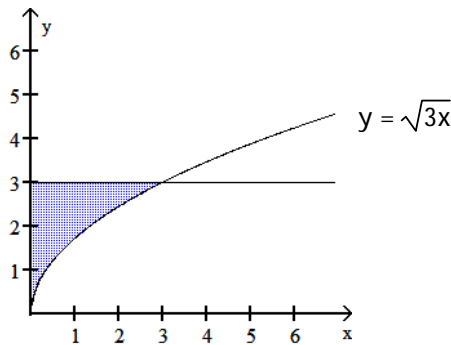


Disc method. Find the volume of the solid generated by revolving the shaded region about the given axis.

1) About the y-axis

1) _____



- A) 3π B) 18π C) $\frac{243}{5}\pi$ D) $\frac{27}{5}\pi$

Disc method. Find the volume of the solid generated by revolving the region bounded by the given lines and curves about the x-axis.

2) $y = \sqrt{\sin 4x}$, $y = 0$, $0 \leq x \leq \frac{\pi}{4}$

2) _____

- A) 2π B) 8π C) $\frac{1}{2}\pi$ D) 4π

Washer method. Find the volume of the solid generated by revolving the region bounded by the given lines and curves about the x-axis.

3) $y = 5x$, $y = 5$, $x = 0$

3) _____

- A) $\frac{25}{3}\pi$ B) $\frac{5}{2}\pi$ C) 15π D) $\frac{50}{3}\pi$

Find the volume of the solid generated by revolving the region about the y-axis.

4) The region enclosed by $x = y^{1/3}$, $x = 0$, $y = 64$

4) _____

- A) 1024π B) 192π C) $\frac{3072}{5}\pi$ D) 256π

Find the volume of the solid generated by revolving the region about the given line.

5) The region in the second quadrant bounded above by the curve $y = 9 - x^2$, below by the x-axis, and on the right by the y-axis, about the line $x = 1$

5) _____

- A) $\frac{45}{2}\pi$ B) $\frac{153}{2}\pi$ C) $\frac{81}{2}\pi$ D) $\frac{648}{5}\pi$

Answers: 1) D 2) C 3) D 4) C 5) B