

Name:

Serial No.:

1. The region bounded by the parabolas $y^2 = 2x$ and $y = 4x^2$ is rotating about an axis, find the **volume** of the resulted solid if the axis of rotation is the line

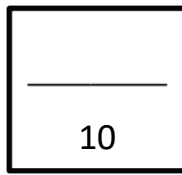
a. $y = 0$,

b. $x = \pi$.

(Just set up the integration formula)

2. The base of a solid is a region which is bounded by the curves $y = 4x$, $y = \frac{1}{x}$ and $y = 1$. If the cross-sections of the solid perpendicular to the y -axis are squares, find the volume of the solid.

(Just set up the integration formula)



Name:

Serial No.:

1. The region bounded by the parabolas $y^2 = 4x$ and $y = 2x^2$ is rotating about an axis, find the **volume** of the resulted solid if the axis of rotation is the line

a. $x = 0$,

b. $y = e$.

(Just set up the integration formula)

2. The base of a solid is a region which is bounded by the curves $y = 4x$, $y = \frac{1}{x}$ and $y = 1$. If the cross-sections of the solid perpendicular to the y -axis are semi-circles with diameters running across the base of the solid, find the volume of the solid.

(Just set up the integration formula)