

MA 2320: Quiz 4

Name: _____

1. Find the volume of the region between $y = x^2 + 2x + 1$ and $y = 3x + 3$ is revolve about the x -axis.
2. Find the volume of the region between $y = \ln(x)$, $y = x$, $y = 0$ and $y = e$ is revolve about the y -axis.

3. $\int x^2 e^{3x} dx$

4. $\int x^3 e^{3x^2} dx$. Try $u = x^2$ and $dv = xe^{3x^2}$.

5. $\int x^2 e^{3x^3} dx$

6. $\int \ln^2(x) dx$

7. $\int \sin^2(3x) dx$

8. $\int \sin^3(4x) \cos^3(4x) dx$