

King Saud University
College of Sciences
Department of Mathematics
1444/Semester-1/Math-104/Quiz-2
Thursday, October 27th, 2022

.....: الاسم

.....: رقم الطالب

Max. Marks: 10

Max. Time: 35 Min.

Question 1: Evaluate the integral $\int x e^x dx$.

Question 2: Sketch the region bounded by the graphs of $y = x^2$ and $x = y^2$, then find its area.

Question 3: Let R be the region bounded by the graphs of $y = x^2$ and $y = 2x$ over the interval $[0, 2]$. Evaluate the volume of the solid generated by revolving R about the x-axis.

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Question 1: Evaluate the integral $\int x \cos x \, dx$.

Question 2: Sketch the region bounded by the graphs of $y = x^2$ and $y = x$, then find its area.

Question 3: Let R be the region bounded by the graphs of $y = 2\sqrt{x}$ and $y = x$ over the interval $[0,4]$. Evaluate the volume of the solid generated by revolving R about the x-axis.

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Question 1: Evaluate the integral $\int x \sin x \, dx$.

Question 2: Sketch the region bounded by the graphs of $y = x^2$ and $x = y^2$, then find its area.

Question 3: Let R be the region bounded by the graphs of $y = 2x^2$ and $y = 4x$ over the interval $[0,2]$. Evaluate the volume of the solid generated by revolving R about the x-axis.