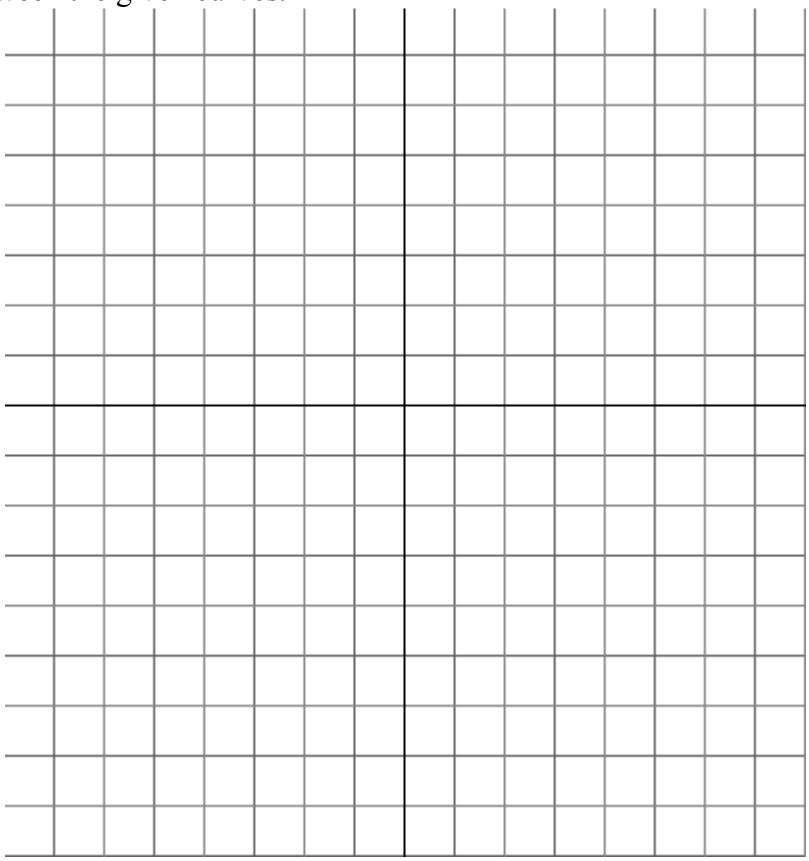
SI Session Week 2 : January 28th
Tuesdays 5:30 – 7:30 PM, Rm. 1130
Wednesdays 4:20 – 6:20 PM. Rm. 1229

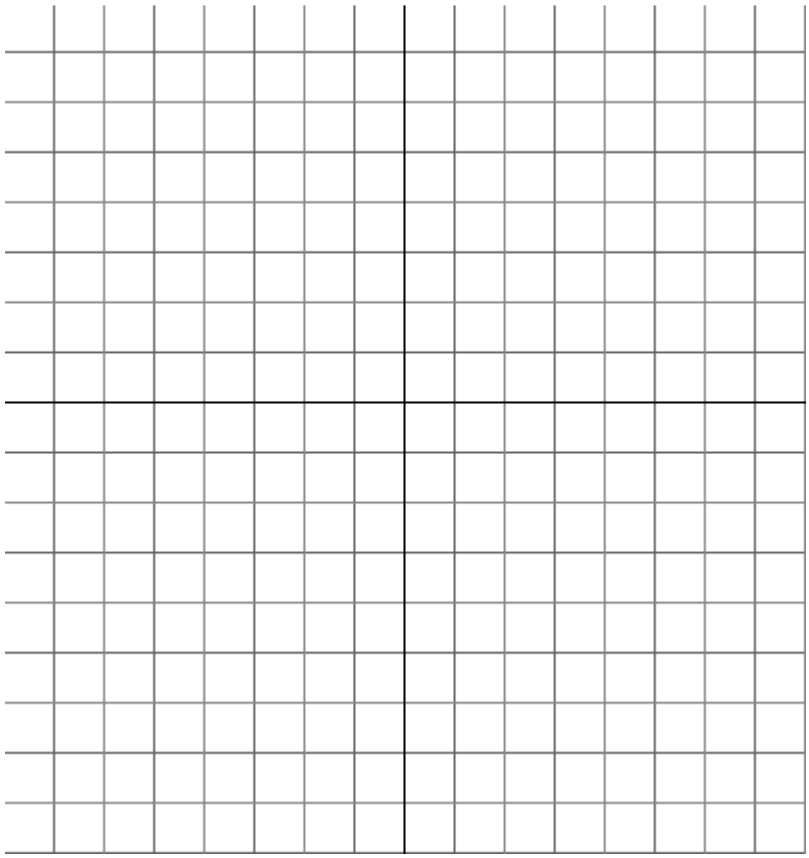
Prof. Stockton : Calculus II : Spring 2008
SI Leader : Neil Jody

Write a definite integral that represents the Area between the given curves.



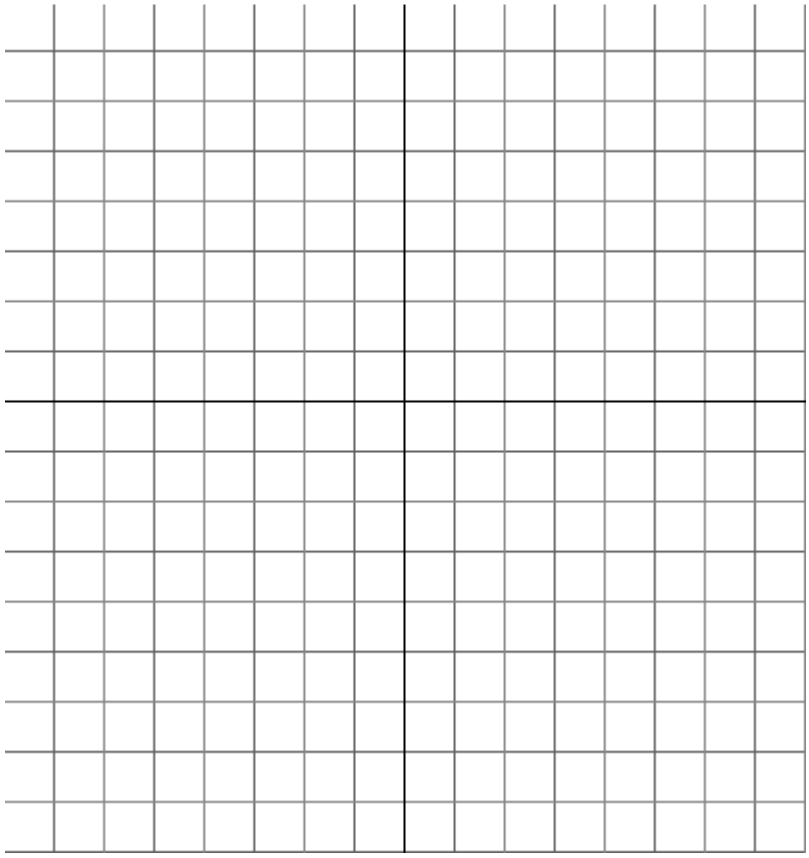
1. $y = \sec^2 x,\ y = 2,\ x = -\frac{\pi}{4},\ x = \frac{\pi}{4}$

2. $y = e^x$, $y = e^{2x}$, $x = 0$, $x = \ln 2$

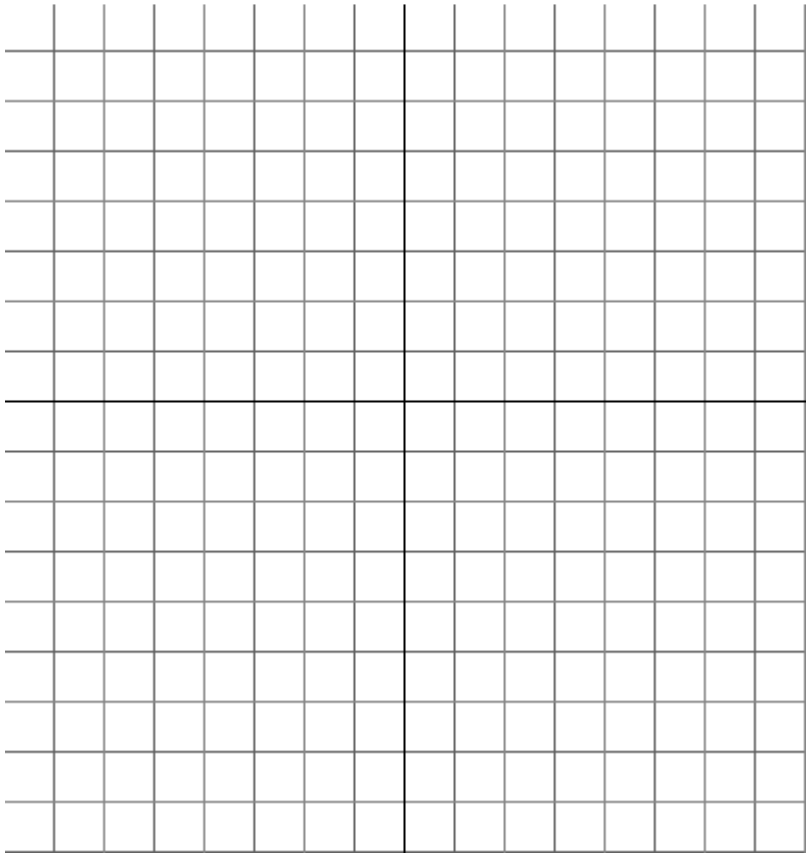


Write a definite integral that represents the volume of the solid that results when the region enclosed by the given curves is revolved about the
x-axis.

1. $y = e^{-2x}$, $y = 0$, $x = 0$, $x = 1$

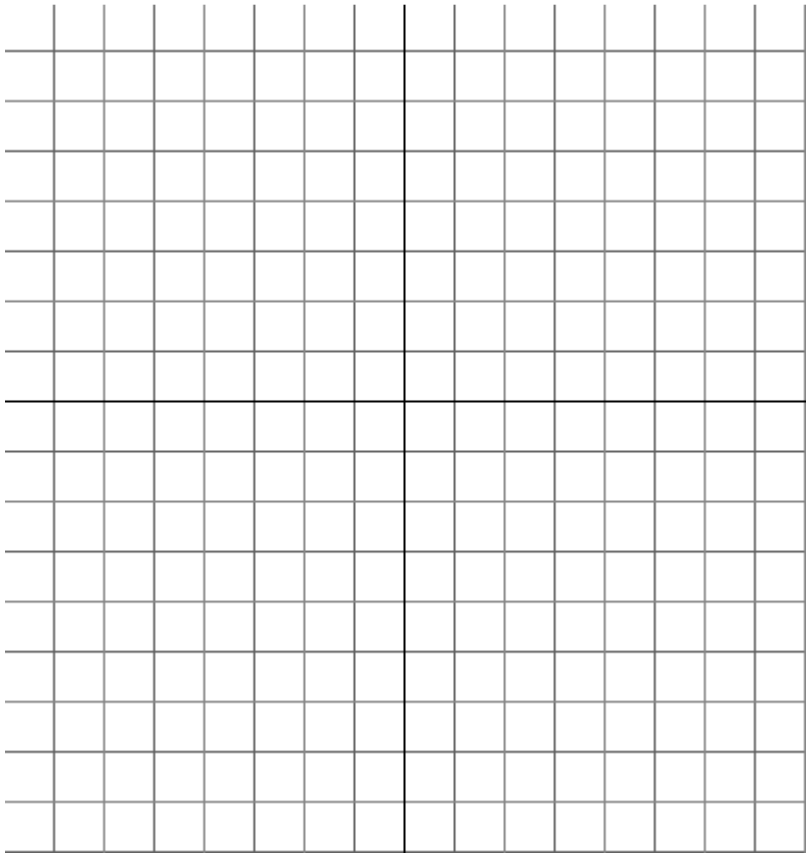


2. $y = \sqrt{25 - x^2}$, $y = 3$

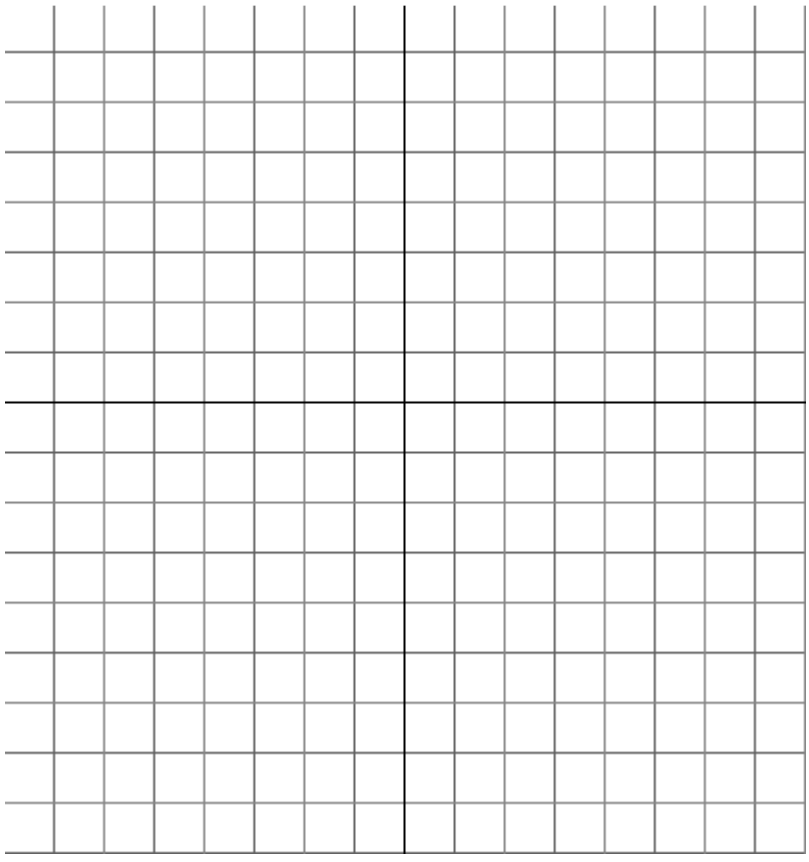


Write a definite integral that represents the volume of the solid that results when the region enclosed by the given curves is revolved about the *y*-axis.

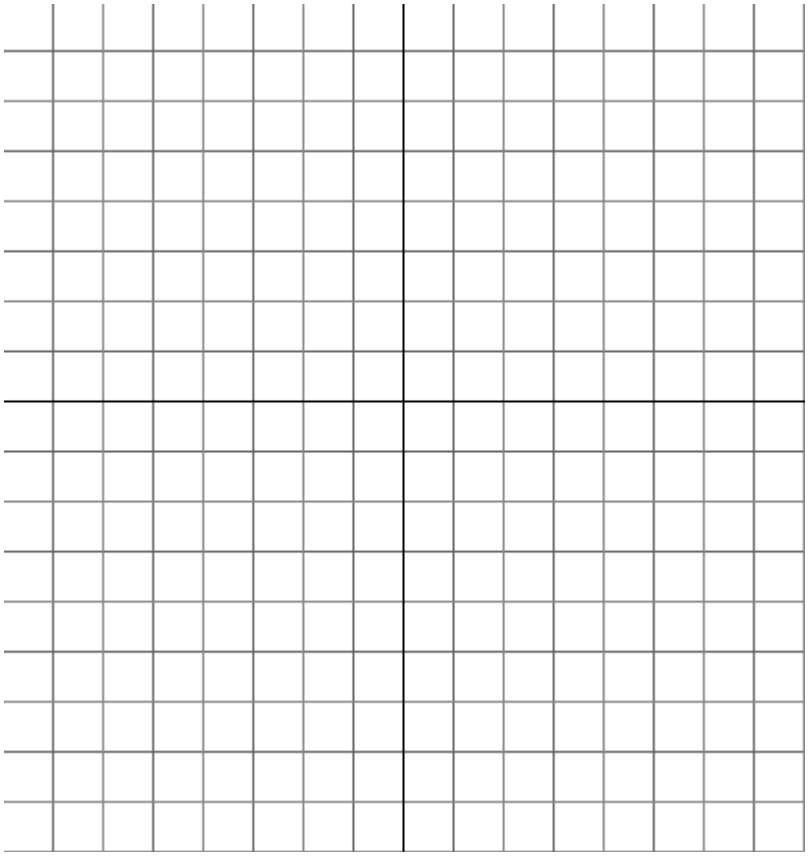
1. $x = y^2,\ x = y + 2$



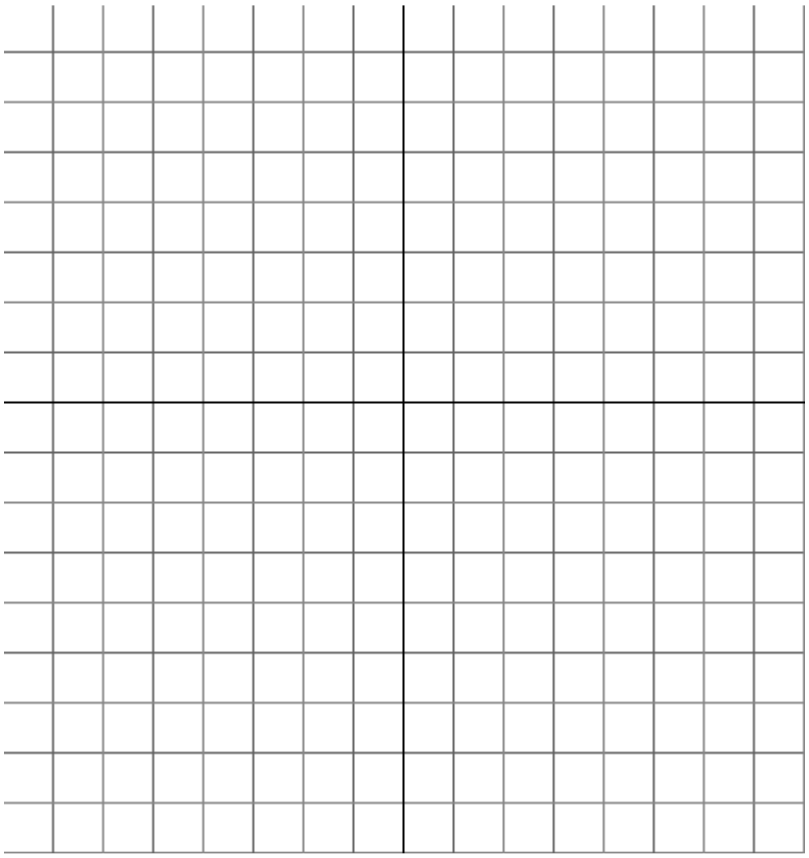
2. $y = x^2,\ x = y^2$



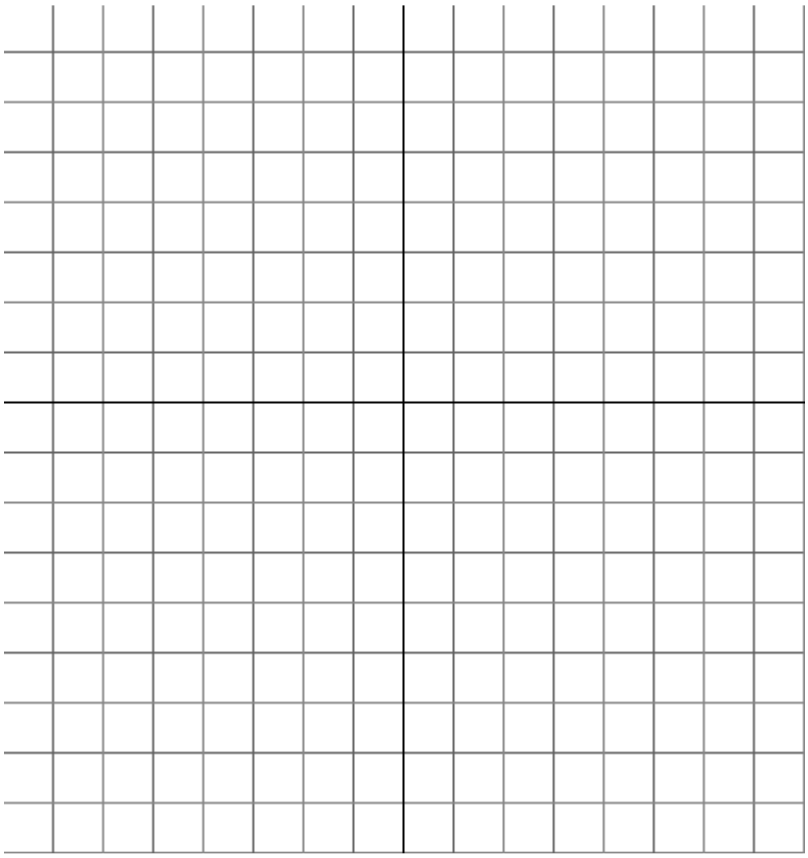
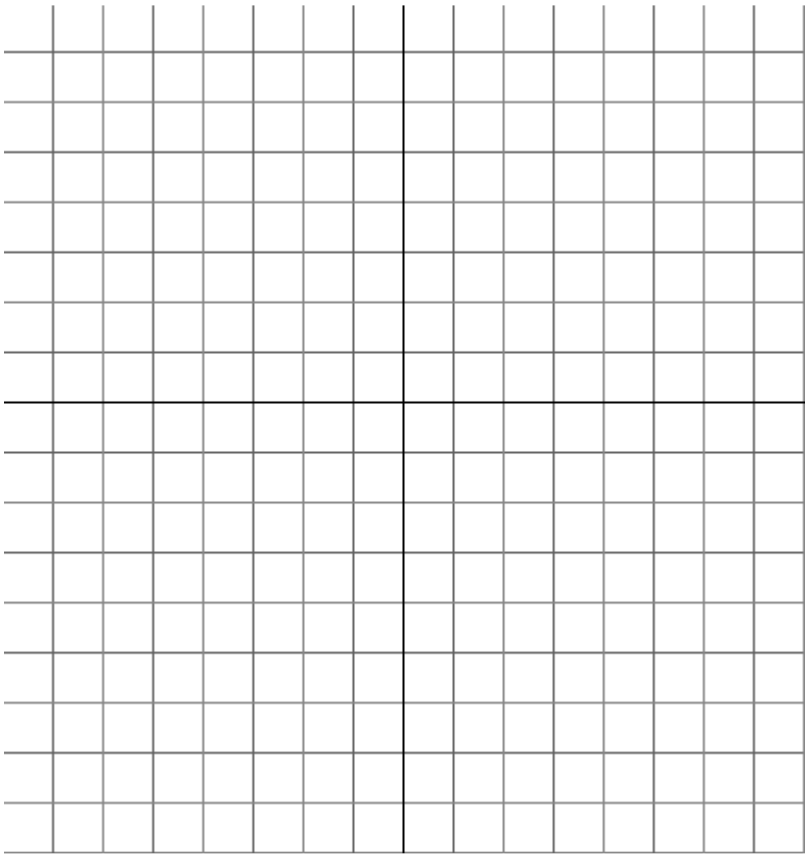
Write a definite integral that represents the volume of the solid that results when the region enclosed by $y = \sqrt{x}$, $y = 0$, $x = 9$ is revolved about the line $x = 9$.



Write a definite integral that represents the volume of the solid that results when the region enclosed by $x = y^2$ and $x = y$ is revolved about the line $y = -1$.



Write a definite integral that represents the volume of the solid that results when the region enclosed by $y = \frac{1}{x^3}$, $x = 1$, $x = 2$, $y = 0$ is revolved about the line $x = -1$.



Write a definite integral that represents the volume of the solid that results when the region enclosed by $y = x^3$, $y = 1$, $x = 0$ is revolved about the line $y = 1$.