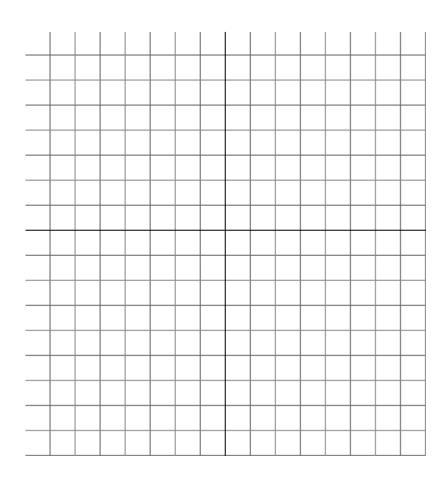
SI Session: July 16th, 2008 Mondays – Thursdays 12:35 PM – 2:05 PM

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

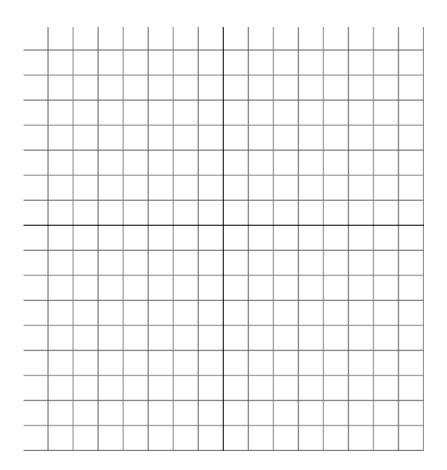
Room 1229

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

(a)
$$f(x) = \sqrt[3]{x-1}$$
, $g(x) = x-1$

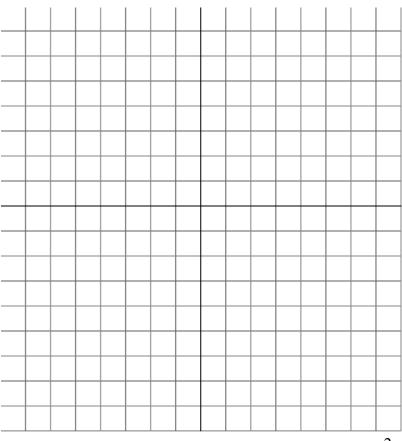


(b)
$$x = \log_3 y$$
, $x = \frac{y-1}{2}$



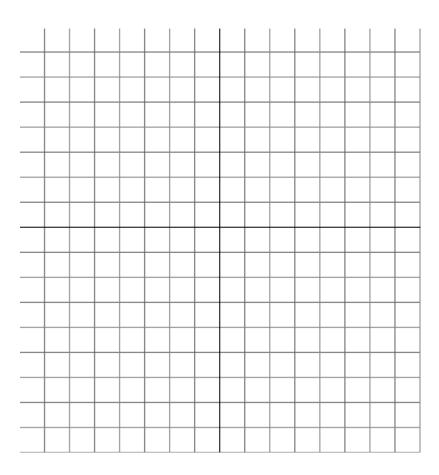
[2] Write a definite integral that represents the volume of the solid that results when the region enclosed by the given curves is revolved about the *x*-axis.

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

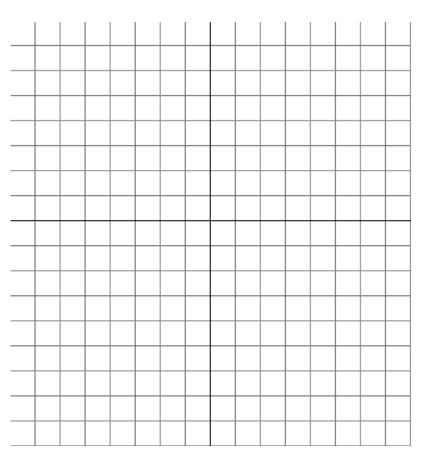


[3] Write a definite integral that represents the volume of the solid that results when the region enclosed by the given curves is revolved about the *y*-axis.

$$x = y^2$$
, $x = y + 2$



[4] 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.



[5] 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.

