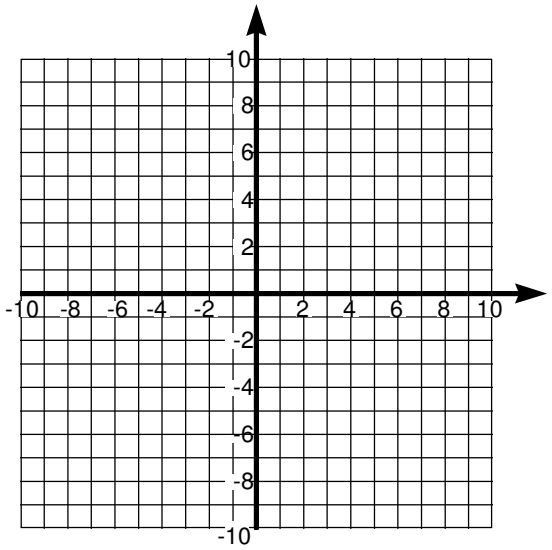
MATH 251/GRACEY NAME_____

WORKSHEET/CHAPTER 7.2

1. Find the volume of the solid bounded by the graph of $y = x^2$ and $y = 2x - x^2$, which is then rotated about the y-axis.

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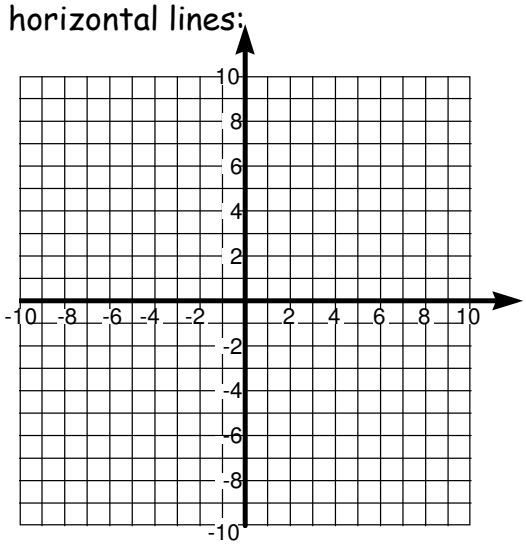
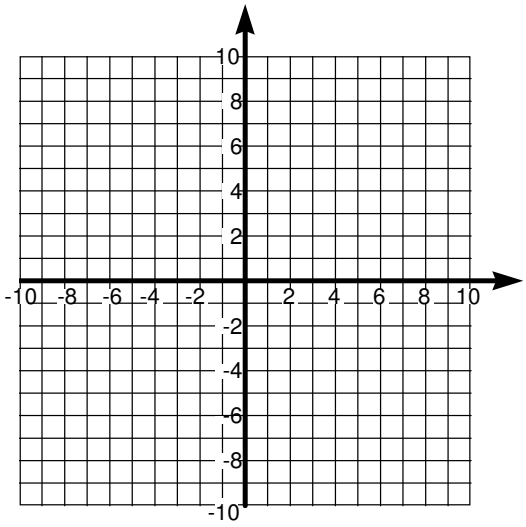
2. Find the volume of the solid bounded by the graph of $y = \cos x$, $x = 0$, $y = 0$, and $x = \frac{\pi}{2}$, which is then rotated about the following horizontal lines:

   a. $y = 0$

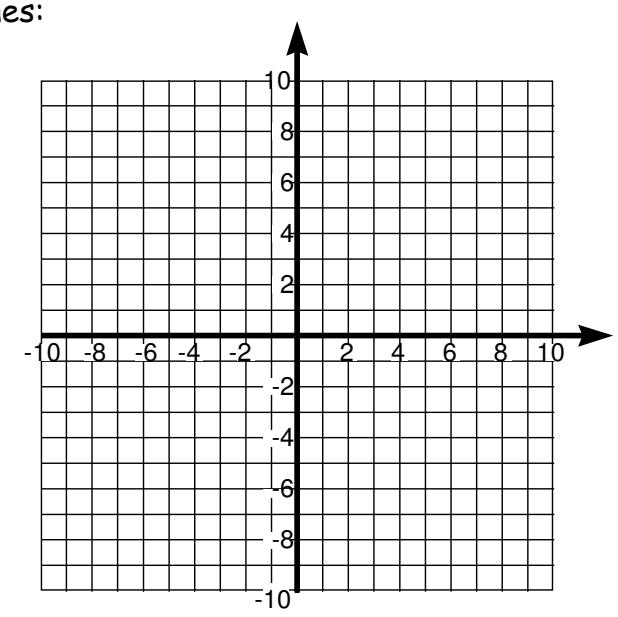



   b. $y = 3$



3. Find the volume of the solid bounded by the graph of $y = \sqrt{x}$, $y = 0$ and $x = 4$ which is then rotated about the following lines:

a. $y = 0$




b. $y = -2$