

MATH 102-13 (112)
QUIZ # 3 (Take-Home)

NAME: ID. #:

Q1. Use cylindrical shells to find the volume of the solid obtained by rotating the region in the first quadrant bounded by $y = x$ and $y = x^3$:

(a) about the x-axis

(b) about the line $x = 1$

Q2. Use cylindrical shells to find the volume of the solid obtained by rotating the region in the first quadrant bounded by $y = \frac{1}{x^2+2x+2}$, $x = 1$, $x = 2$ about the line $x = -1$