

Quiz 3

Name: _____

To receive credit you MUST SHOW ALL YOUR WORK.

1. Set up an integral (or integrals) that represent each of the following. You are **NOT** required to evaluate the integrals. A sketch the region or solid is required, along with the integral (or integrals).

(a) (5 pts) The area of region between the curves $x = 2 - y^2$, $x + y = 0$.

(b) (5 pts) The volume of the solid obtained when the region bounded by $y = \sqrt{x}$, the x -axis and the line $x = 4$ is revolved around the line $x = 4$. Specify clearly what method you are using. You will receive **2 bonus** points if you correctly solve the problem with both methods.