Quiz 4A

Closed book/notes. No calculators allowed.

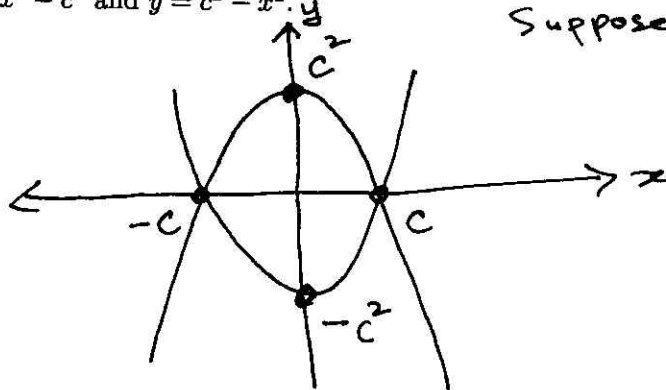| Name:	$\mathcal{P}rof.$ Medina
UAlbany Email:	Solution

1. Sketch the region, clearly labeling all intersects, of the area bounded between the two parabolas $y = x^2 - c^2$ and $y = c^2 - x^2$.

Suppose $c \neq 0$.

2. Setup the integral, but do not evaluate, of the area bounded between the two parabolas $y = x^2 - c^2$ and $y = c^2 - x^2$.

$$\int_{-c}^{c} (c^2 - x^2) - (x^2 - c^2)\, dx$$

Grade: /10