Quiz 6. Math 10-270. February 29, 2012.   Name

1. Determine the points of intersection of the circle of radius 3 and center $(1,2)$ with the line of slope 2 through the origin. *Find the points exactly using square roots rather than decimal expansions.*

2. Draw a parabola, then cut it with a straight line, and explain what Archimedes's Theorem says.

3. What inconvenient truth was the mathematics of the Greeks unable to deal with? How does the number system we use today deal with the matter? (Feel free to use diagrams in your explanations.)