

Quiz 6. March 25, 09. Name

1. Describe the geometry (both horizontal and vertical) as well as the basic structure of Brunelleschi's cupola of the Santa Maria del Fiore in Florence. Include sketches and diagrams in your explanations.

2. Write a succinct paragraph that explains how Raphael's *School of Athens* and Michelangelo's *The Creation of Adam* are related to the essential spirit of the Renaissance.

3. Use the discussion in the text, and in particular the result $P_1 = (x_1, y_1) = \left(\frac{dx_0}{d + y_0}, \frac{cy_0}{d + y_0} \right)$, to solve the following problem. Consider the points $(-1, 4)$ and $(2, 2)$ on the tile floor and the line segment on the tile floor that they determine. See the first diagram on the next page. Draw the perspective image of the two points and the line segment just referred to into the second diagram. Let $c = 8$ and $d = 10$, and determine the equation of the line that this line segment (the one drawn in perspective) lies on. Do your computations – *neatly* – on the next page and draw the segment carefully in the space provided.

