

Essay 1 UHP 300: Drawing in Mathematical Light Spring 2003

Due: Thursday, 27 March

- Choose **one** of the following.
- Strive for clarity, coherence, and concision. Hold your written work to **fewer than five typed pages**.
- Using specific examples to illustrate general ideas can be helpful.

1.1 Comparing one-point and two-point perspective

Do two drawings that are studies for a narrative painting—you come up with the subject matter. In one drawing use one-point perspective and in the other use two-point perspective. Make both drawings treat the same subject, but vary the space.

In writing, discuss how the change from one-point to two-point change the meaning and feeling of the work? Or does it?

1.2 Problems and constructions in art and math

- Using only spheres, cylinders, and rectangular boxes draw an object (human, animal, or natural form).
- Using only straightedge and compass construct an equilateral triangle, a square, a regular pentagon (equilateral and equiangular), and a regular hexagon.

In writing, compare and contrast these two activities. You might examine issues such as the posing of a problem, the division/reduction of the problem to simpler tasks, the process of construction.

1.3 Objects and forms

How do we see geometric form *in* something? Is it an approximation? Is it there exactly? Do we impose or force it into the object? How does this issue bear on Hale's suggestion to "to think in mass?" (p. 16) Illustrate your ideas with pictures—diagrams, sketches, drawings.

1.4 Seeing volume

Our visual contact with an object is by means of a surface. How is it that we can "see" the volume that the object occupies? (See Kramer, p. 10.) Illustrate your ideas with pictures—diagrams, sketches, drawings.