CS130 Winter 2013 Homework 2 $\,$

January 14, 2013

Name:

Student ID:

- 1. What are typical Gamma values for CRT displays?
- 2. Come up with an algorithm that determines whether two line segments in 2D space intersect each other and where the point of intersection is if they do.
- 3. What are the major steps in the graphics pipeline?
- 4. In the DDA algorithm from lab 2, a line's slope is compared to 1 to distinguish between cases. What's special about 1? Why not 2?
- 5. (True/False) Using the alpha channel allows you to represent more unique colors.
- 6. (Multiple Choice) The midpoint (or Bresenham) algorithm for rasterizing lines is optimized relative to the DDA algorithm in that it A) avoids a round operation B) is incremental C) uses only integer arithmetic D) all of the above E) A and B only