Name:

Student ID:

CS130 Homework 2

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 lines slope is compared to 1 to distinguish between cases. Whats special about 1? Why not 2?

5. (True/False) Using the alpha channel allows you to represent more unique colors.

6. The midpoint (or Bresenham) algorithm for rasterizing lines is optimized relative to the DDA algorithm in that it

   I. avoids a round operation

   II. is incremental

   III. uses only integer arithmetic

   (a) I only
   (b) II only
   (c) III only
   (d) I and II only
   (e) I, II and III