## CS130 Winter 2013 Homework 3

## Name:

## Student ID:



- 1. Find a sequence of transformation matrices (translation, rotation, and scaling matrices) that map the triangle ABC to the triangle A'B'C'.
- 2. What kinds of transformations can a rigid body undergo?
- 3. List all the viewing transformations in the graphics pipeline.
- 4. The z-buffer approach to rendering A) selects which fragment to draw based on its depth B) orders triangles from back to front C) orders triangles based on the average z-values of their vertices D) selects which vertices to clip based on their z-values E) B and C only
- 5. (T/F) The viewport transformation maps from normalized device coordinates to screen space.
- 6. (T/F) Given any matrices  $M_1, M_2$ , and  $M_3, M_3M_2M_1 = M_1M_2M_3$ .