Question 3: 3D picking (25 points)

Imagine adding a sketching capability to your program from Assignment 4. At any point (assuming animation is turned off), a user can sketch directly on an object seen on the screen. The sketched strokes would "stick" to the surface of the object, and move with it. This would be the 3D equivalent of annotating a document in Word of PDF.

(a) Given everything you have learned and implemented in this course, how will you support this operation in your scene graph program? Be specific about what which (if any) implemented features you would use, and how. (15 points)

(b) Briefly explain one advantage and one drawback of the method you have devised in (a) (10 points)