CS 31 – Exam Review Problem(s) – RP1 – Out Sept. 6, Due Before Class Sept. 8

1. In class, we noted that GLSL shaders interfacing with Javascript in WebGL will only draw polygons that are triangles. We used that in the square demonstration program to draw a square composed of two triangles drawn with TRIANGLE_FAN. Suppose instead that we had used TRIANGLE_STRIP and re-ordered to vertices to take that into account. How many of the following four vertex re-orderings would have successfully produced a square with TRIANGLE_STRIP?

```
1
           var vertices = [
                                                                                     var vertices = [
                vec2( -0.5, -0.5),
vec2( -0.5, 0.5),
                                                                                           vec2( 0.5, -0.5).
                                                                                           vec2( -0.5, -0.5 ),
3
                                                                          3
                vec2( 0.5, -0.5),
vec2( 0.5, 0.5)
                                                                                          vec2( -0.5, 0.5),
vec2( 0.5, 0.5)
4
                                                                          4
5
                                                                          5
          ];
                                                                                     ];
6
                                                                          6
          var vertices = [
                                                                          1
                                                                                    var vertices = [
1
                vec2( -0.5, -0.5 ), vec2( 0.5, -0.5),
                                                                                         vec2( -0.5, 0.5),
vec2( 0.5, 0.5),
vec2( 0.5, -0.5),
vec2( -0.5, -0.5)
3
                                                                          3
                vec2( -0.5, 0.5),
                                                                          4
                vec2( 0.5, 0.5)
                                                                          5
                                                                                   ];
          ];
(a) None would work
```

- (b) 1
- (c) 2
- (d) 3
- (e) All 4 would work