1. Let $R$ be the non-convex, seven-sided region as shown. For both (a) and (b), the triangle fan or strip should exactly cover the region $R$, with no degenerate triangles and all triangles front-facing under the default CCW convention. (Your answers should include repeated vertices if needed.)

(a) Give a variable order for the vertices that covers $R$ with a single triangle fan.

$v_6, v_5, v_4, v_3, v_2, v_1, v_0$ — or any cyclic permutation, but not starting with $u_0$ or $u_5$

(b) Give a variable order for the vertices that covers $R$ with a single triangle strip.

$u_0, u_6, u_1, u_5, u_2, u_4, u_3$ (Other answers are possible)

2. A cube has vertices $v_0$ through $v_7$ as shown. Given an ordering of the vertices that renders the four side faces — but not the top or bottom faces — as a single triangle strip. The faces should all face outward from the cube. (Your answer should include repeated vertices if needed.)

$v_2, v_0, v_3, v_1, v_7, v_5, v_6, v_4, v_2, v_0$.

(Many other answers are possible.)