## Quiz 1

Friday, Jan. 26.

## NAME

1. What is the valence of the vertex $E$ in the following graph?

2. Is graph I connected? And graph II?

3. For each of the graphs below, state whether it has an Euler circuit. If the answer is yes, draw such a circuit (use arrows and number the sequence of edges in the order traveled).

4. Find an efficient eulerization of the following graph; draw a circuit that reuses 5 edges.
(Use the left-hand graph to draw the Eulerization, and the right-hand graph to draw the circuit that reuses 5 edges)

5. Same question, except that this time you must draw a circuit that reuses 2 edges.

