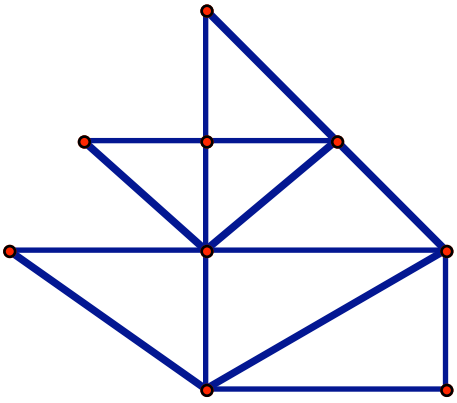
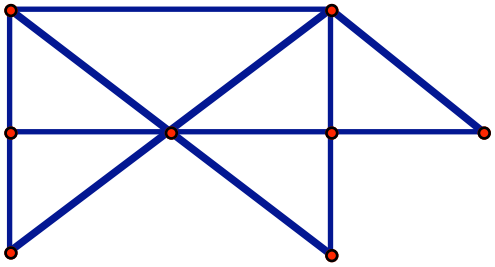
The quiz will have some graphs (probably 3). For each graph you will be asked to label each vertex with its valence number; tell whether it will have an Euler circuit or path and find the Euler circuit or path if it has one. Try doing these 3 things for each of these graphs. Answers are on the next page. On the real quiz, you will have two copies of each graph to write on.

Instructions for 1-6:
A. label each vertex of this vertex-edge graph with its valence number
B. tell whether it has an Euler circuit or path (or not) and how you know.
C. if this graph has an Euler circuit or path, show what it is (number the edges to show your tracing order)

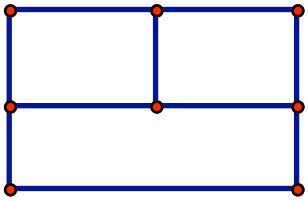
1.



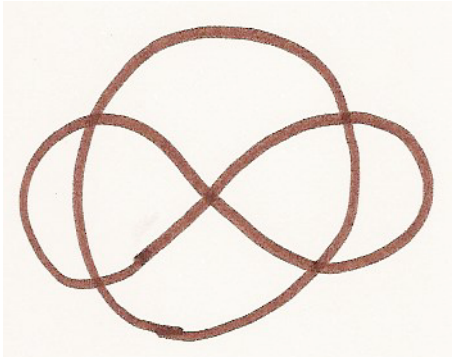
2.



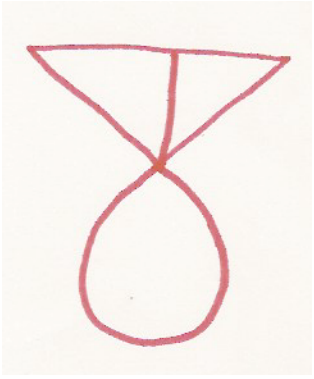
3.



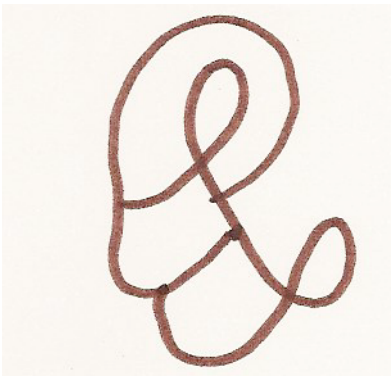
4.



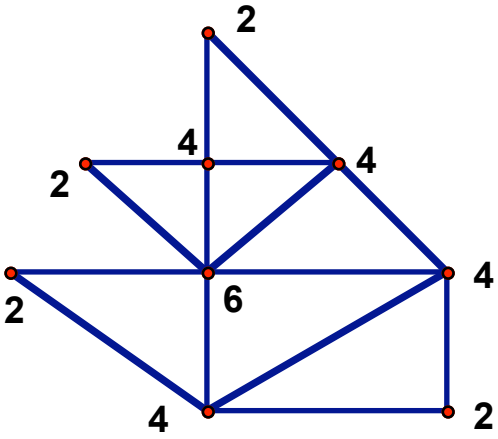
5.



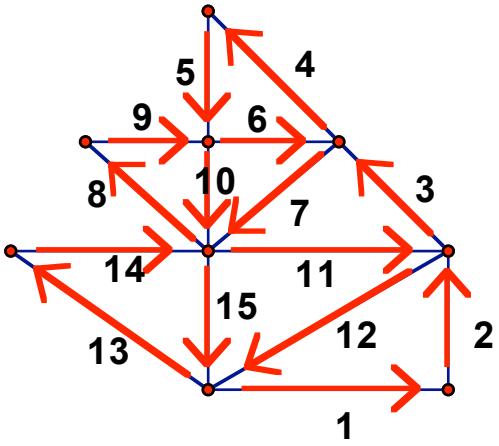
6.



1. A.

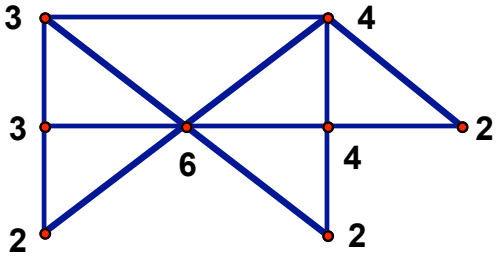


C. Many answers are possible

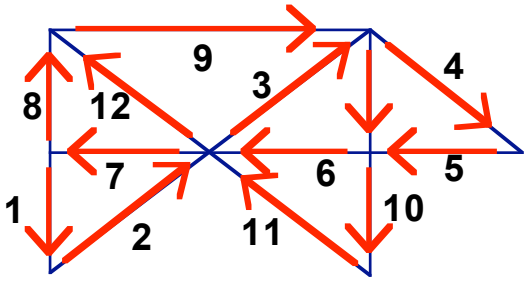


B. It has an Euler circuit because all of the vertices are even.

2. A.

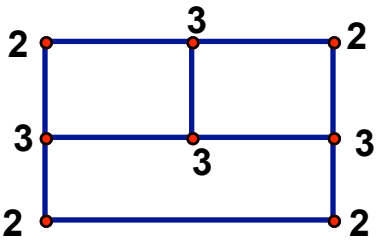


C. Many answers are possible (but all have to start or end at the same place)



B. It has an Euler path because only two vertices are odd.

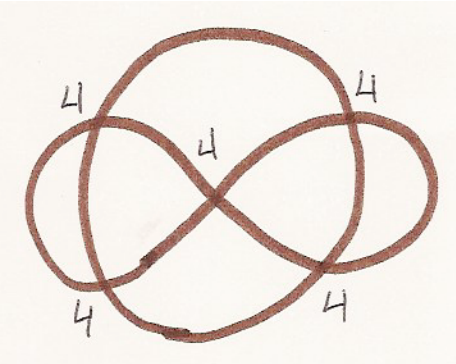
3. A.



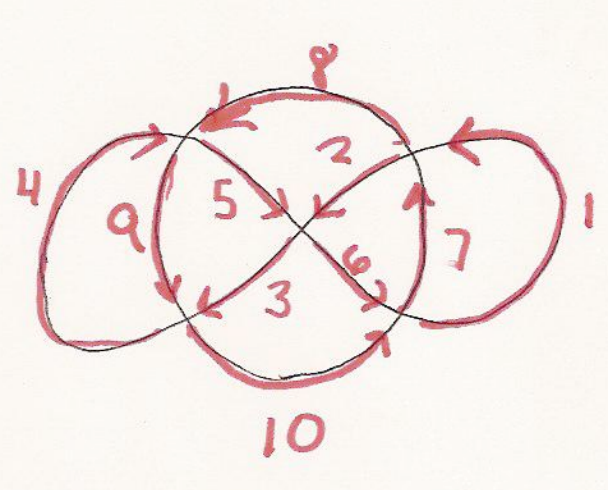
C. Can't be traced

B. It is not traceable because it has more than two odd vertices

4. A.

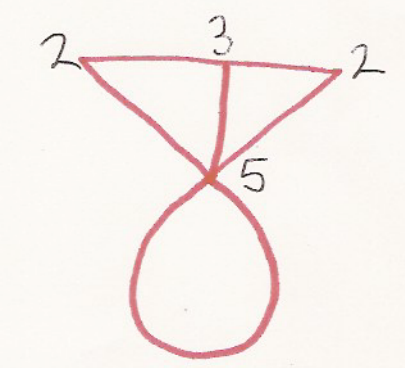


C. Many answers are possible

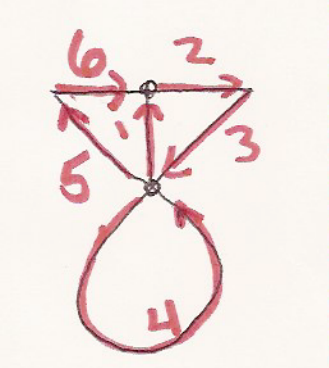


B. It has an Euler circuit because all of the vertices are even.

5. A.



C. Many answers are possible (but all have to start or end at the same place)



B. It is not traceable because it has more than two odd vertices

3. A.

C. Can't be traced

B. It is not traceable because it has more than two odd vertices