Math 1060: Worksheet June 7, 2017   Name: **Key**
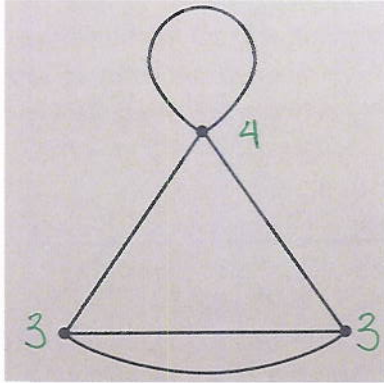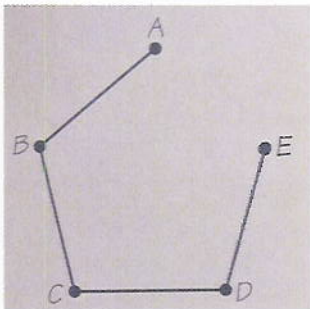
1. Consider the following figure.

(a) Is this a graph?

Yes

(b) If it is a graph, what is the number of vertices and edges?
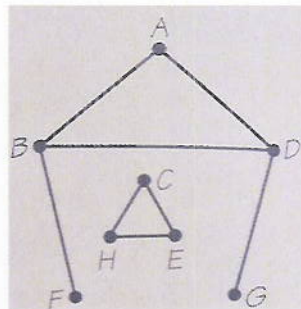
3 vertices, 5 edges

(c) If it is a graph, label each vertex with its valence.
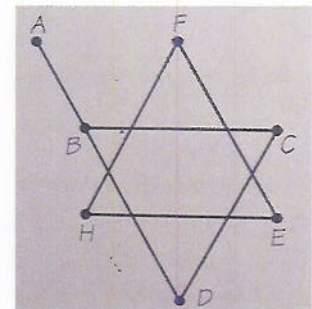
See figure.

2. The vertices of the following graphs represent cities and the edges represent roads connecting them.

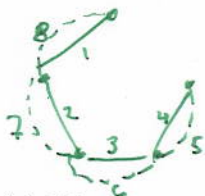(a)   (b)   (c)

(a) In which graphs could somebody located in city A (legally) drive to any other city?

(a) & (c)

(b) Solve the Simplified Chinese Postman Problem for graphs (a) and (c). Why am I not asking you to solve it for graph (b)?

(c) What's a possible explanation for why graph (b) is not connected?

Cities C, H & E are on an island you can only get to by Ferry.