1. Explain why the graph shown below does not have an Euler circuit.

![Graph](image)

Use the following to answer questions 2-3.

Identify an Euler circuit on the following graphs by numbering the sequence of edges in the order traveled.

2. 

3. 

Use the following to answer questions 4-5.

Add wiggly edges to find an efficient Eulerization of the following graphs.
6. For the street network shown below, draw a graph that would be useful for routing a garbage truck. Assume all streets are two-way and that passing once down the street is sufficient for collecting trash from both sides.
Answer Key - Chapter 1

1. The graph does not have an Euler circuit because it is not connected.

2. Answers may vary. One solution is:

3. Answers may vary. One solution is:

4. Answers may vary. One solution is:

5. Answers may vary. One solution is:

6.