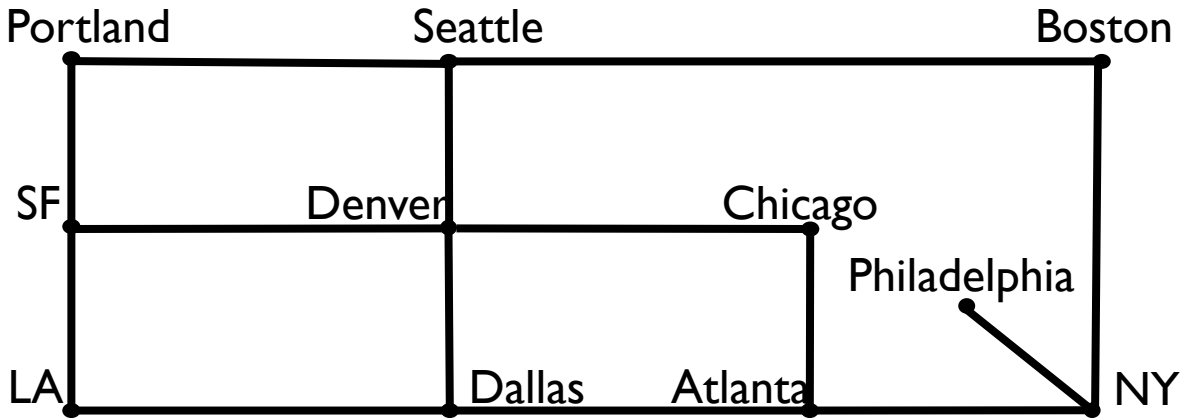For each term, please give the definition and then provide an example using the vertices/edges in the graph below.

Walk:
ex:

Path:
ex:

Simple path:
ex:

Closed Walk:
ex:

Circuit:
ex:

Cycle:
ex:

Degree:
Max Degree Vertex:
Min Degree Vertex:

Consider the graph G = (V,E) represented by the following data:

V = {1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15}
and
E = { {1,3}, {1,5}, {2,4}, {2,10}, {3,5}, {4,10}, {3,4}, {6,7},
      {8,9}, {5,15}, {10, 15}, {11,13}, {12,13}, {13, 14} }

Answer the following:
a) Is G connected? Explain.

b) How many connected components does G have?

c) What is the distance between vertex 2 and vertex 5? Why?

d) Produce a nice drawing of this graph. If you did not do this
    before you answered parts a – c, explain yourself!