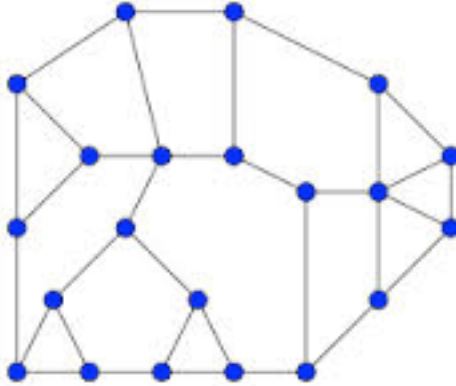


Name: \_\_\_\_\_ *Problem of the Day #14 (10 points)*

**Graph Theory.**



a. (4 points) Confirm the value of the Eulerian characteristic  $V-E+F$  for this graph.

b. (2 points) Confirm Euler's Degree Theorem for this graph.

c. (2 points) Does this graph possess an Euler cycle? EXPLAIN YOUR ANSWER.

d. (2 points) Does this graph possess an Euler path? EXPLAIN YOUR ANSWER.