|  | Graph A | Graph B | Graph C | Graph D |
| :--- | :---: | :---: | :---: | :---: |
| How many edges does this graph have? | 12 | 9 | 10 | 8 |
| What is the order of the graph (number of vertices)? | 9 | 10 | 6 | 9 |
| How many components does the graph have? | $\mathbf{1}$ | $\mathbf{3}$ | $\mathbf{1}$ | $\mathbf{1}$ |
| Is the graph connected? | Yes | No | Yes | Yes |
| Is the graph simple? (no loops or multiple edges) | No | Yes | No | Yes |
| Is the graph a tree? (no circuits) | No | No | No | Yes |
| Find the degree of vertex A | $\mathbf{2}$ | 0 | 4 | 2 |
| Find the degree of vertex B | 4 | 2 | 4 | 1 |
| Find the degree of vertex E | 3 | $\mathbf{2}$ | 3 | $\mathbf{1}$ |

Graph A


Graph B


Graph D


For Graphs A, C and D, can you find an Euler Circuit or Euler path? (label it on the graph if you find one.) Graph A has an Euler path; starting and ending vertices are D and E. Graph C has an Euler path; starting and ending vertices are E and F. Graph D does not have an Euler path or circuit.

