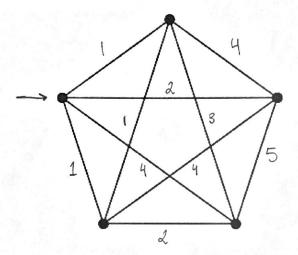
1. ($\underline{\hspace{1cm}}$ / 2 points) Fill in the blank:

The sorted-edges algorithm and nearest-neighbor algorithms are ______ algorithms because they do not necessarily find a Hamiltonian circuit, they just approximate one.

The sorted-edges algorithm and nearest-neighbor algorithm are used to find _____ circuits in a complete graph.

2. ($__$ / 5 points) Use either the sorted edges algorithm or the nearest-neighbor algorithm (starting at the indicated vertex) on the following graph. What is the cost?



3. (___/3 points) Use Kruskal's algorithm to find a minimal spanning tree in the following graph.

