

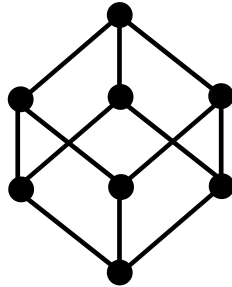
Name:

Date: Friday, September 2, 2016

**MATH 181 F1 Quiz #2**

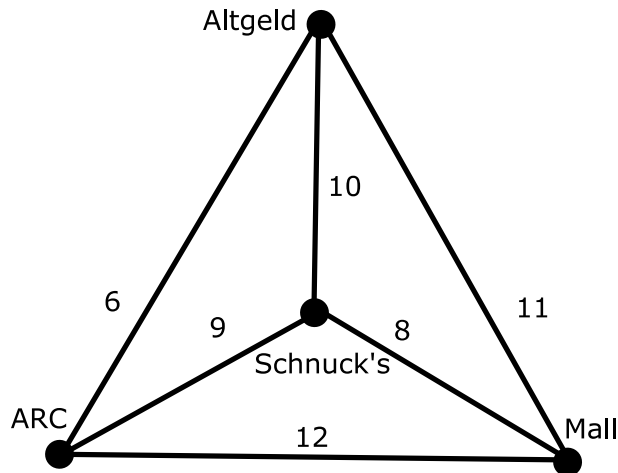
**Directions:** You have 15 minutes for this quiz. Please write clearly and justify your answers.

**Question 1 (2 points):** Consider the graph below and select one answer.



- a.) This graph has an Euler circuit but no Hamiltonian circuit.
- b.) This graph has Hamiltonian circuit but no Euler circuit.
- c.) This graph has both an Euler circuit and a Hamiltonian circuit.
- d.) This graph has neither an Euler circuit nor a Hamiltonian circuit.

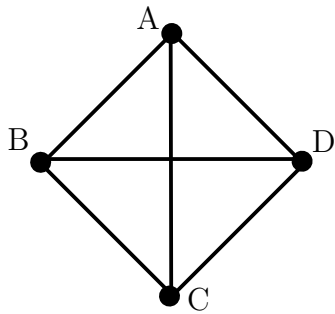
**Question 2 (3 points):** Find a minimum cost spanning tree.



More on the back.

**Question 3 (5 points):**

Use the method of trees to find all Hamiltonian circuits starting at  $A$ .



Draw three different Hamiltonian circuits starting at  $A$ .

