QUIZ 5 (MATH 61, SPRING 2017)

Your Name: _____

UCLA id: _____

Math 61 Section: _____

Date: _____

The rules:
This is a multiple choice quiz. You must circle **only correct** answers with an **ink pen**.
Every correct answer is scored positively, every false answer negatively.
You are allowed to use only this paper and pen/pencil. No calculators.
No books, no notebooks, no phones, no laptops. You MUST write your name.

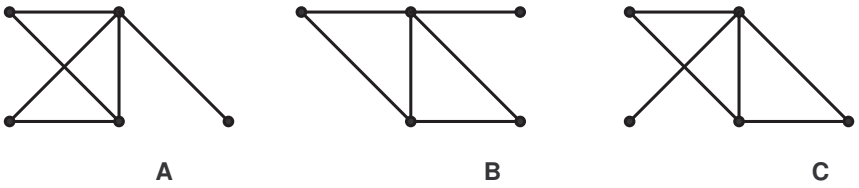
Points: (10 per correct answer)

_____

Question 1. A Hamiltonian cycle in $K_{8,8}$ has this many edges:

8 16 32 64 256 such cycle does not exist none of these

Question 2. Of the following graphs, which are isomorphic?



none of these **A** and **B** **A** and **C** **B** and **C** **A**, **B** and **C**

Question 3. The complete graph K_5 contains subgraphs isomorphic to the following:

O_4 P_4 K_4 K_5 C_4 C_5 $K_{2,3}$ $K_{3,3}$

Important: circle all that apply!

Question 4. Which of the following graphs have exactly 6 edges?

P_5 P_6 P_7 O_6 C_4 C_5 C_6 C_7 K_4 K_5 K_6

Important: circle all that apply!

Question 5. There exist two connected non-isomorphic graphs with the same score.

True False Hamilton proved this cannot be determined Outside the scope of Math 61