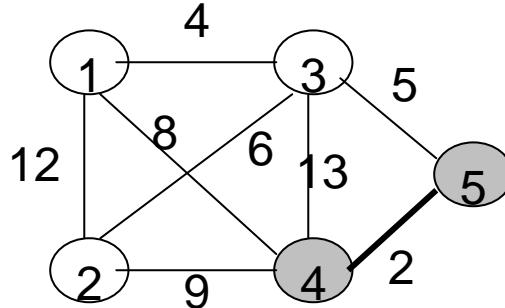**CS4321 QUIZ 4 (Nov. 27)**

NAME (5 points):

1. (1 point) The cost of selection() using pseudomedian() is___O(n)_____.

2. (2 points) Show the content of array A[6] = {5, 13, 7, 12, 9, 10} after partition() is called for quicksort(). What value does partition() return assuming the array index starts from 0?

Answer: {5, 7, 9, 10, 13, 12}; return 3.

We're going to construct an MST for the graph below, where edge (4,5) and nodes 4 and 5 are already in the partial solution.

3. (1 point) What is the next edge added to the partial MST if you use Prim's algorithm and start from node 4?

Anwer: (3, 5).

4. (1 point) What is the next edge added to the partial MST if you use Kruskal's algorithm?

Answer: (1, 3).