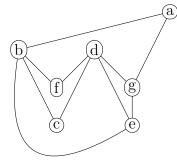
Name:_____

NetID:_____ Lecture: B

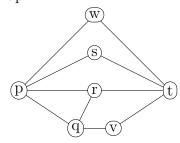
Discussion: Friday 11 12 1 2 3 4

1. (10 points) Are graphs X and Y (below) isomorphic? Justify your answer.

Graph X



 $\operatorname{Graph}\, Y$



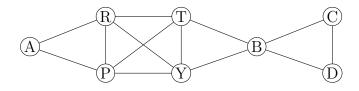
2. (5 points) The complete graph K_8 contains 8 nodes. How many edges does it have?

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Discussion: **Friday** 11 **12** 1 2 3 4

1. (10 points) How many isomorphisms are there from G (below) to itself? Justify your answer and/or show your work clearly.



2. (5 points) Complete this statement of the Handshaking Theorem.

For any graph G with set of nodes V and set of edges E, ...