

GRAPH THEORY: CLASS 4

1) (This problem is from last time) Determine whether the following sequences are graphical. If yes, draw a corresponding graph.

$s_1 : 6, 5, 5, 4, 3, 2, 1.$

$s_2 : 5, 3, 3, 3, 3, 2, 2, 2, 1.$

2) Problem 3.1 page 61.

Give an example of three different (non-isomorphic) graphs of order 5 and size 5.

3) Show that the two graphs below are isomorphic.

4) Give two examples of non-isomorphic 3-regular graphs of order 10.