

# **Complex Networks: Quiz #14**

Due on Feb 6th, 2019

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**Problem 1**

Consider a configuration model network that has vertices of degree 1, 2, and 3 only, in fractions  $p_1$ ,  $p_2$  and  $p_3$ , respectively

**Answer 1**

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**Problem 2**

Find the value of the critical vertex occupation probability  $\psi_c$  at which site percolation take place

**Answer 2**

**Problem 3**

Show that there is no giant cluster for any value of the occupation probability  $\psi$  if  $p_1 > 3p_3$

**Answer 3**

**Problem 4****Answer 2**