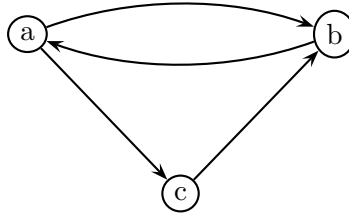


**CSCI4390/6390 – Data Mining**  
**Fall 2007, Quiz 8**  
**Total Points: 20**

Name: \_\_\_\_\_

1. Given the graph below, find the fixed-point of the prestige vector. Try at least 10 iterations.



2. Given the two dimensional data:  $(1,2)$ ,  $(4,3)$ ,  $(5,4)$ ,  $(2,1)$ ,  $(5,3)$ . Show one iterations of the  $k$  means algorithm. Let  $k = 2$ , and assume the initial clusters are centered at  $(2,2)$  and  $(3,3)$ .