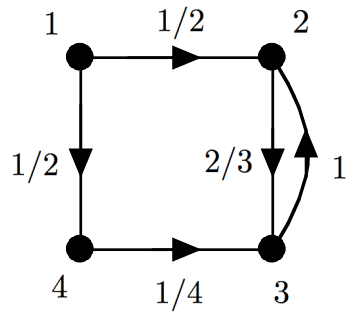
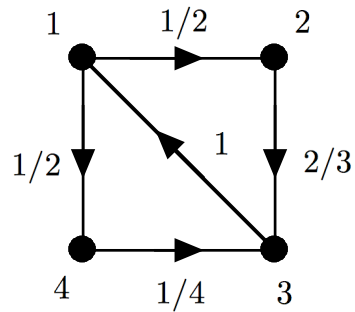


**MATH 56A: STOCHASTIC PROCESSES
WORKSHEET**

1. WORKSHEET 1



A



B

For each of these Markov chains:

- (1) Circle the communication classes.
- (2) Label them R for recurrent and T for transient.
- (3) Are the recurrent classes periodic?
- (4) Write down the transition matrices in each case.
- (5) Find $p_2(1, 3)$ and $p_3(1, 3)$. (The answer is the same for both A and B . Why is that?)