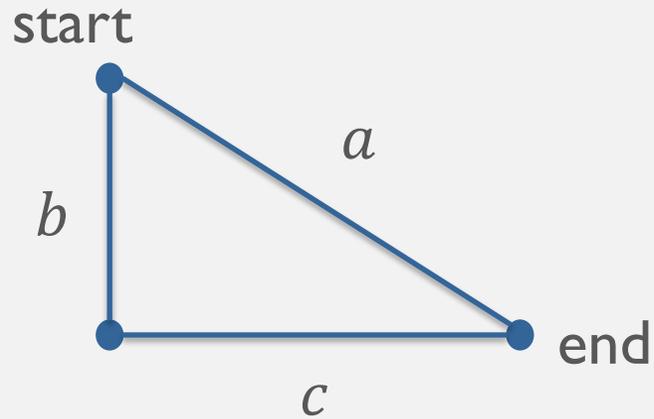


## Quidditch Tournament – Best of 3 vs Skidmore

- Play up to 3 games. The first team to win twice wins the tournament.
- Midd has  $1/2$  probability of winning the first game.
- If Midd wins a game, the next game they will have probability  $2/3$  of winning.
- If Midd loses a game, the next game they will have probability  $1/3$  of winning.

What is probability Midd wins the tournament?

# Percolation Question



- $a, b$  are present with probability  $1/2$
- If  $b$  is present, then  $c$  is present with probability  $3/4$ .
- If  $b$  is not present, then  $c$  is present with probability  $1/2$ .

What is the sample space? (Use tree method)

What is the probability of there being percolation: a path from start to end?  
(Use tree method.)