

## MAT 364

## Quiz 1

Fall 2018

1. The game of domineering is played on the board below. What is the outcome class of this game?

	X	

- a)  $\mathcal{L}$                       b)  $\mathcal{R}$                       c)  $\mathcal{N}$                       d)  $\mathcal{P}$                       e) none  
 Correct Answer:  $\mathcal{P}$

2. Same game as in the previous question. What is the height of the game tree?

- a) 5                      b) 4                      c) 6                      d) 7                      e) 3  
 Correct Answer: 4

3. Same game as in the previous question. If the game is played by two players, what is the *minimum* number of moves that the game will last?

- a) 5                      b) 6                      c) 7                      d) 4                      e) 3  
 Correct Answer: 3

4. Same game as in the previous question. If Left is going to play first, how many winning moves does Left have?

- a) 0                      b) 1                      c) 3                      d) 2                      e) 4  
 Correct Answer: 0

5. Same game as in the previous question. If Right plays first, how many winning moves does Left have (after Right's first move)?

- a) 0                      b) 1                      c) 3                      d) 2                      e) 4  
 Correct Answer: 1