

Show all work clearly and in order, and circle your final answers. Justify your answers algebraically whenever possible; you can use your calculator if needed. You have 10 minutes to take this quiz.

- 1.** If an event is certain to happen it has a probability of zero.  
A) True  
B) False
- 2.** What is more likely to happen?  
A) Rolling a dice and getting a 6  
B) Tossing a coin and getting 'heads'
- 3.** How many possible outcomes are there when you toss a coin? (fair coin)  
A) 1  
B) 2
- 4.** How many possible outcomes are there when you toss 3 coins simultaneously? (fair coin)  
A) 3  
B) 8
- 5.** How many possible outcomes are there when you toss  $n$  coins simultaneously? (fair coin)  
A)  $n$   
B)  $2^n$
- 6.** How many possible outcomes are there when you toss 1 coin for  $n$  times? (fair coin)  
A)  $n$   
B)  $2^n$
- 7.** What's the probability of all heads, when you toss 1 coin for  $n$  times? (fair coin)  
A)  $1/n$   
B)  $(1/2)^n$