

## **Math 153 - Quiz 8**

October 26, 2017

Name \_\_\_\_\_

Score \_\_\_\_\_

Show all work to receive full credit. Supply explanations when necessary.

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1. (4 points) In a certain town, 47% of the children dress as vampires on Halloween.
  - (a) In a random sample of 20 children, what is the expected number of vampires?
  
  
  
  
  
  
  
  
  
  
  - (b) In a sample of 20, what would be an unusually large number of vampires? Show work to justify your reasoning.
  
2. (6 points) A certain YouTube video gets viewed 43 times per hour on average.
  - (a) In any given hour, what is the probability that the video gets viewed exactly 40 times?
  
  
  
  
  
  
  
  
  
  
  - (b) In any given hour, what is the probability that the video gets viewed fewer than 40 times?
  
  
  
  
  
  
  
  
  
  
  - (c) In any given hour, what is the probability that the video gets viewed at least 45 times?