Assignment 8

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1. A professor is constructing a multiple-choice history quiz. Quiz has ten questions each with four possible answers. Minimum passing score on the quiz is 60% (6 out of 10).

a. Student has not studied and guesses randomly on all ten questions. What is the probability that the student is able to pass the quiz.

Notes Each question is independent Student must get six correct in order to pass correct answer on guessing = 1/4

answer:

```
(1/4)^6
```

```
## [1] 0.0002441406
```

b. How much lower would his chance of passing be if each question had five possible answers instead of four.

Notes Each question is indepdentn need to get six correct correct answer on guessing = 1/5

answer:

```
(1/5)^6
```

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## [1] 6.4e-05
```

c. Using (a) as the probability