RCodingASsignment3

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Question 1

If 10% of people who are given a certain drug experience Dizziness, find these probabilities using R code for a sample of 25 people who take the drug.

A. Exactly 3 people will become dizzy

```
n=25
p=0.10
k=3
dbinom(k,n,p)
```

```
## [1] 0.2264973
```

B. At least 9 people will become dizzy.

```
k=9
pbinom(k-1,n,p,lower.tail=F)
```

```
## [1] 0.0004575493
```

C. Less than 7 people will become dizzy

```
k=6
pbinom(k,n,p)
```

```
## [1] 0.9905236
```

Question 2

There were ten green bottles sitting on the wall. The probability of a green bottle accidentally falling is 0.95. What is the probability that fewer than 8 of the green bottles accidentally fall?

```
n=10
p=0.95
k=7
pbinom(k,n,p)
```

```
## [1] 0.01150356
```

Question 3

The LMB Company manufactures tires. They claim that only .007 of LMB tires are defective. What is the probability of finding 2 defective tires in a random sample of 50 LMB tires?

```
n=50
p=0.007
k=2
dbinom(k,n,p)
```

[1] 0.0428446