

Analysis of Environmental Data - Probability and Frequentist Concepts

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Question 1

```
dbinom(x= 3,size= 4, p=0.75)  
0.421875
```

Question 2

```
pbinom(q=3, size=4, p=0.75)  
0.6835937
```

Question 3

```
1 - (pbinom(q=3, size=5, p=0.75))  
0.6328125
```

Question 4

```
pnorm(1.2,mean = 2, sd= 2)  
0.3445783
```

Question 5

```
1 -(pnorm(1.2, mean = 2, sd = 2))  
0.6554217
```

Question 6

```
a = pnorm(3.2,mean = 2, sd= 2)
```

```
b =pnorm(1.2, mean = 2, sd = 2)
```

```
a-b
```

Question 7

The histogram is not normally distributed but if you continue to increase the sample button the shape of the histogram becomes more representative of the beta distribution.

Question 8

The histogram is less skewed and you can already assume that it is going towards a normal distribution if you keep increasing the sample size.

Question 9

The sample mean is approximately normally distributed.

Question 10

Because if you increase the sampling size the standard error gets smaller and the standard deviation stabilizes.

Question 11

Sample size and standard deviation.

Question 12

$$25^3$$

$$15625$$

Question 13

$$B + 25^{16400}$$