Math 5710 Thursday, 7/23/20 Quiz 23

1. What is your name?

Brock Francom

2. A number is randomly selected from { 1, 2, 3, ..., 100 }. What is the probability that 58 is selected?

$\frac{1}{100} = .01$

3. A number is randomly selected from [1, 100). What is the probability that 58 is selected?

$\frac{1}{\infty} \approx 0$

4. A number is randomly selected from [1, 100). What is the probability that the number selected is an element of [50, 60)?

$$\frac{\text{number of elements in } [50,60)}{(\text{number of elements in } [1,50)) + (\text{number of els. in } [60,100))}$$

$$\downarrow$$

$$\frac{\infty}{\text{"bigger" } \infty}$$

So probability that the number is in [50,60) is less than 1, but I am not sure how to do much more.

After looking at the solutions, It depends on the sample space. I therefore stick by my earlier conclusions.

5. Smile.