

**Question 13.1**

For each of the following distributions, give an example of data that you would expect to follow this distribution (besides the examples already discussed in class).

- a. Binomial  
In a very optimistic Covid-19 trial (to bring us back to a normal world), a vaccine will cure cases in some patients, and not in others.
- b. Geometric  
The amount of times the vending machine gives me skittles before a pack gets stuck.
- c. Poisson  
The amount of puppies adopted tomorrow in North Carolina.
- d. Exponential  
The TIME between puppy adoptions tomorrow in North Carolina.
- e. Weibull  
The amount of time between bad passes for a soccer player. More talented players ( $k > 1$ ) will have more time between poor passes versus lesser ( $k < 1$ ) players.