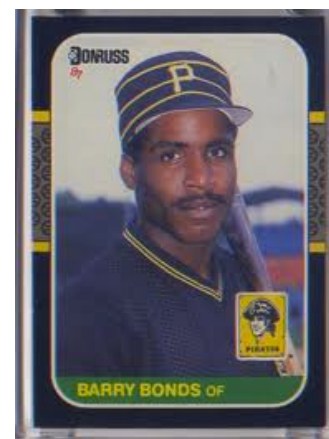


Waiting For Sammy

Geometric or Waiting Time Distributions



How many times have you experienced or witnessed an event that seemed "one in a million" a truly "rare" event?

How would you know?

Questions to consider:

Are the events independent?

What is the probability of being successful the first time? What's the probability of failure?

Read the handout - Activity 1 only.

Don't do anything else yet.

Any questions?

Simulation Time

How are we going to simulate a $1/3$ chance of winning?

`randint(1, 3)` 1 = success

What's the $P(\text{success})$? = $1/3$

What's the $P(\text{failure})$? = $2/3$

How many in the class do you expect to succeed on the:

1st trial? 7

2nd trial? 5

3rd Trial? 3

Do the simulation three times. We need at least one hundred values.

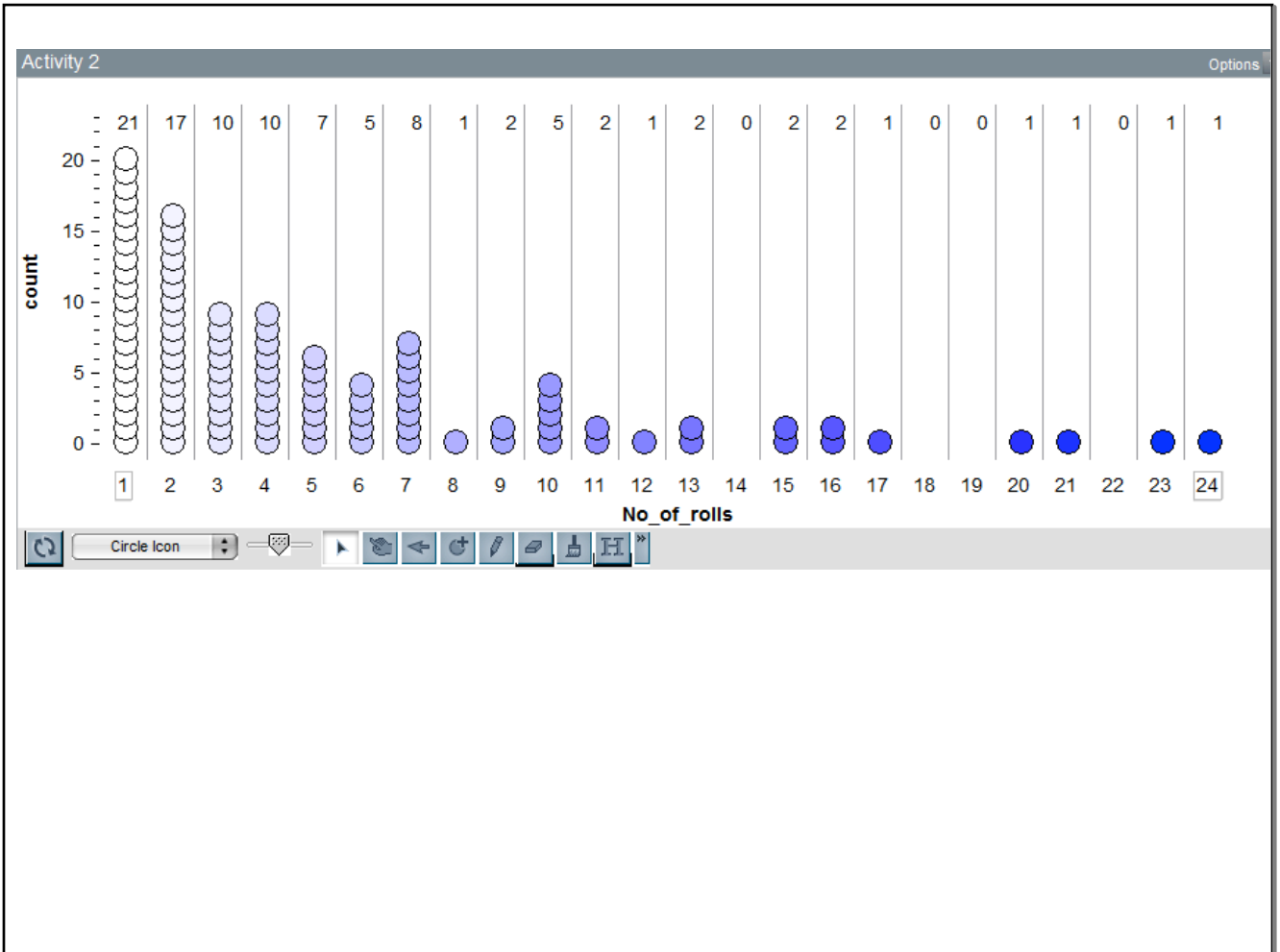
Enter your three numbers on the laptop.

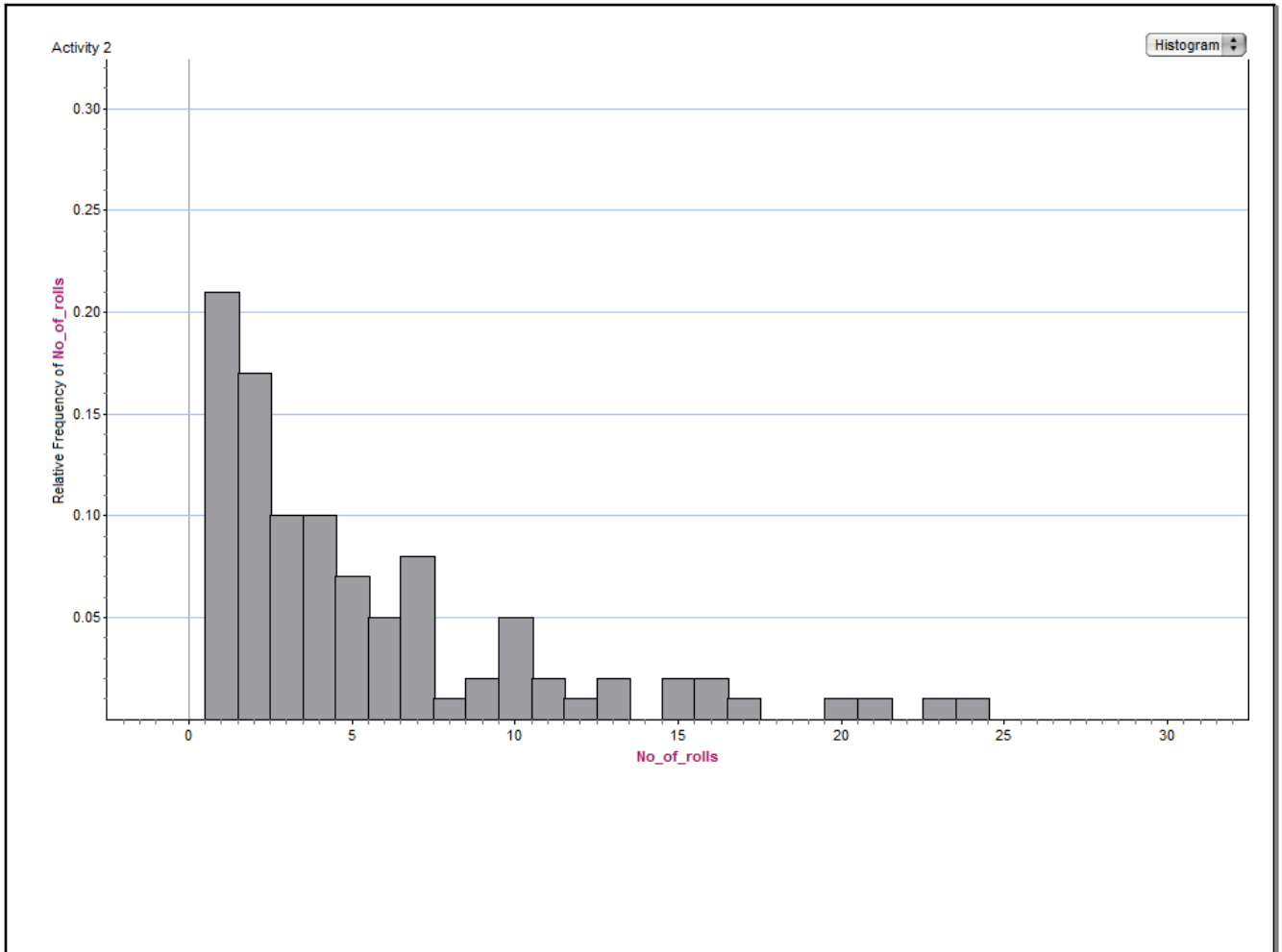
When everyone has finished, create and fill in a table and answer the questions a thru e for Activity 1.

Finish Activities 2, 3, and the Wrap Up.

`randint(1, 6, 2)`

Something to notice from these graphs.





relative frequency IS probability

