

Initial Response Post:

Your friend Jacob goes by the mantra “tails never fails”. You are going to use this Discussion to test this theory.

Name your favorite musician, actor, author or artist and do an internet search to find his or her age. Flip a coin one time for each year the person is old. If s/he is 43, flip the coin 43 times. Record the number of tails you obtain.

Use your results to state the empirical probability that the coin will land on tails expressed as a fraction, a decimal, and a percentage. Round your answers to two decimal places, if necessary.

Based on your experiment, did you find that “tails never fails”? Explain the difference between theoretical and empirical probability to your friend Jacob. In your explanation, state the theoretical probability of getting a tail when flipping a coin and compare it to the empirical results you got from your experiment.

Initial Response Post Example

NOTE: Not all parts of the Discussion are included in this Example. Read the Discussion Question thoroughly and respond to all parts of the Question.

Singer Singerson is 43 years old. I flipped the coin 43 times and got 18 tails.

The empirical probability of tails is $18 / 43 = 0.42 = 42\%$

I did not find that “tails never fails” because...

The difference between theoretical and empirical probability is ... The theoretical probability of flipping tails is ... compared to my empirical probability result of 0.42 ...