* 1. 420

( 10 - 1 ) + ( 10 – 2 ) = 17

417



10+10-4=16

416



**the sequence is 11 and has 1 run**

**expected number of runs 3**



|  |  |  |  |
| --- | --- | --- | --- |
|  | -0.5 | 4 | 8.5 |
|  | 1 | 2 | 3 |
|  | -0.75 | 2.75 | 4.5 |

=>=>



First, let me say a couple of words about what is a hypothesis. A hypothesis is a suggested solution for an unexplained occurrence that does not fit into current accepted scientific theory.

Here are some examples of hypothesis statements:

1. Bacterial growth may be affected by moisture levels in the air.

2. If sugar causes cavities, then people who eat a lot of candy may be more prone to cavities.

Hypothesis testing is the process of analyzing the data associated with it to determine the correctness of the hypothesis.

The primary trait of a hypothesis is that something can be tested and that those tests can be replicated. For hypothesis testing the important thing, it's data. Scientists need to collect as much data as possible to do some analytical work. They are trying to answer an interesting question, so the first step is to identify this question and generate possible answers(hypotheses). Then when you collect the data you can analyze it and see if your hypothesis is supported or not. A hypothesis can be often examined by multiple scientists to ensure the integrity and veracity of the experiment. This process can take years.

Upon analysis of the results, a hypothesis can be rejected or modified, but it can never be proven to be correct 100 percent of the time.