|  |  |  |
| --- | --- | --- |
| Engineer | Concrete Does not meet Req. | Concrete meets the specs |
| Use concrete | Bad Decision Type II Error | Good decision |
| Don’t use concrete | Good decision | Bad decision Type I Error |

Our belief is about the population parameter(

Every

Every

If the arrow made by Ha is to the right, then it is upper tail

If arrow made by Ha points to the left, then it is the lower tail

Z =

Typical values of Alpha are 1%,5%,10%

* Where Mu is the bench mark value

(P-value <

(P - value >

P- Value Strength of Decision

* The smallest significance level at which would be rejected

The probability of observing a sample statistic(

Things to extract from the Problem statement

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* What is the BM value(M, p)
* Sample mean(
* Sample size (n)
* Std. Deviation

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* Sample proportion (
* Sample size
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Significance level,

Pearson product moment correlation coefficient,

Coefficient of Determination, ,

provides the percent of variance (fluctuation) of one variable that is predictable from the other variable

Y = a + bx

**Std. Error of the Estimate**

*= .949*