

From a table you obtained by rolling a 6-sided die find out, if the die is not fair (N=36).
 Use chi-2 test with the usual significance level.

Ho: the die
 H1: the die

#	observed	expected	chi2
1	2	6	2.666667
2	5	6	0.166667
3	9	6	1.5
4	2	6	2.666667
5	7	6	0.166667
6	11	6	4.166667
36			11.33333 TEST VALUE

χ

Alfa= 0.05
 D.O.F= 5
 critical
 value= 11.0705

The null hypothesis is rejected, we accept the H1, the die is not fair

is fair
is not fair

$$\chi^2 = \sum_{i=1}^k \frac{(O_i - E_i)^2}{E_i}$$

