

df numerator = 2, df denominator = 3 for our example.

df for numerator

df for
denominator

df2/df1	1	2	3	4	5
1	161.4476	199.5000	215.7073	224.5832	230.1619
2	18.5128	19.0000	19.1643	19.2468	19.2964
3	10.1280	9.5521	9.2766	9.1172	9.0135
4	7.7086	6.9443	6.5914	6.3882	6.2561
5	6.6079	5.7861	5.4095	5.1922	5.0503

So we would need an F value of greater than 9.5521 for our result to be significant at $p < 0.05$

An example

Imagine that you are Formula 1 team director. You're interested in understanding how the number of points that a team scores is predicted by the amount of money invested in the team. As well as being in charge of F1, you also have a secret interest in statistical analysis. In "dataset1" you will find (for each of the 20 drivers) the amount of money invested in their particular car (in £100,000s) plus the total number of points they were awarded over the season. Work out the simple linear regression equation that captures the relationship between investment (as our predictor) and points awarded (as our outcome).