- A good model will have large MS_M and a small MS_R

- In other words, the improvement of the model compared to the mean will be good.

- The difference between the model and our observed data will be small.

$$F = \frac{MS_M}{MS_R}$$

- If MS_M is large and MS_R is small, then F will be large.

- We can determine whether our F value is significant by looking up the critical values on the F table.

- For SS_M the degrees of freedom = number of variables in model (in our case 2).

- For SS_R the degrees of freedom = number of observations – number of parameters being estimated, including the constant (in our case 5-2 = 3)