[[1]]

value mean deviations sq deviations

1 51 48.2 2.8 7.84

2 45 48.2 -3.2 10.24

3 33 48.2 -15.2 231.04

4 45 48.2 -3.2 10.24

5 67 48.2 18.8 353.44

[[2]]

value mean deviations sq deviations

1 23 35.4 -12.4 153.76

2 43 35.4 7.6 57.76

3 23 35.4 -12.4 153.76

4 43 35.4 7.6 57.76

5 45 35.4 9.6 92.16

[[3]]

value mean deviations sq deviations

1 56 69.8 -13.8 190.44

2 76 69.8 6.2 38.44

3 74 69.8 4.2 17.64

4 87 69.8 17.2 295.84

5 56 69.8 -13.8 190.44

Sum of squared deviations from the mean (SS) for the groups:

[1] 612.8 515.2 732.8

Var1 =153

Var2 =128.8

Var3=183

MSerror=155.07

dferror=15−3=12

SSerror=1860.8

**Test statistic and critical value**

F=9.75

Fcritical(2,12)=3.89Fcritical(2,12)=3.89