Problem 7. Compute the F statistic for a one-way analysis of variance investigating whether differences exist between the three levels of the factor below and calculate the effect size associated with this test.

Group1	Group2	Group3
8	7	2
7	6	5
6	5	4
9	6	4
8	4	6
7	5	5
8	6	3
3	4	2

```
##              Df Sum Sq Mean Sq F value Pr(>F)
## group         2  39.08  19.542   8.778 0.0017 **
## Residuals    21  46.75   2.226
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Problem 8. Compute the F statistic for a one-way analysis of variance investigating whether differences exist between the three levels of the factor below and calculate the effect size associated with this test.

group1	group2	group3
55	45	92
64	34	34
34	43	45
53	53	54
67	65	65
86	76	76
67	34	35
67	36	98
65	34	76
48	88	45
91	87	51

```
##             Df Sum Sq Mean Sq F value Pr(>F)
## group        2    511   255.4   0.637  0.536
## Residuals   30  12033   401.1
```

Problem 9. Compute the F statistic for a one-way analysis of variance investigating whether differences exist between the four levels of the factor below and calculate the effect size associated with this test

Group1	Group2	Group3	Group4
2	2	3	1
3	0	4	0
4	-1	1	0
3	2	-1	3
2	-3	-2	2
1	-4	-3	6

```
##              Df Sum Sq Mean Sq F value Pr(>F)
## group         3  38.79  12.931   2.531 0.0862 .
## Residuals    20 102.17   5.108
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Problem 10. Compute the F statistic for a one-way analysis of variance investigating whether differences exist between the three levels of the factor below and calculate the effect size associated with this test.

Group1	Group2	Group3
6	5	9
7	4	4
6	3	5
5	7	2
6	8	3
6	5	4
6	6	NA
NA	4	NA
NA	3	NA
NA	7	NA
NA	6	NA

```
##              Df Sum Sq Mean Sq F value Pr(>F)
## group         2   7.28   3.638    1.28  0.299
## Residuals    21  59.68   2.842
## 9 observations deleted due to missingness
```