# Homework for Module 9

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#### 11.1.3

Table 1: Analysis of variance table

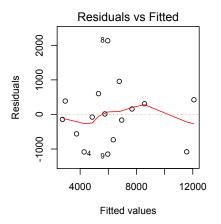
Source	Degrees of Freedom	Sum of Squares	Mean Squares	F-statistic	p-value
Treatments	7	126.95	18.14	5.01	0.002
Error	22	79.64	3.62		
Total	29	206.59			

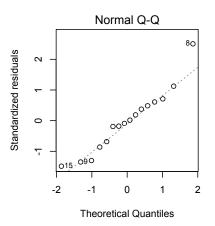
#### 12.1.1

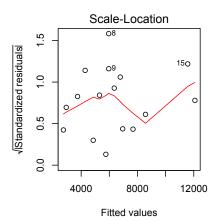
- a) 21.2
- b) 5.1
- c) 0.59
- d) 0.4
- e) 0.35

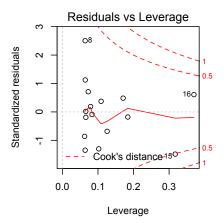
#### 12.2.4

a)









- b)
- c) \$7756.321K
- d) \$879.9K
- e) \$17789.711K

#### 12.3.3

- a)  $8.532 \times 10^{-2}$
- b) (0.82, 1.19)
- c) t-value = 11.76 and the p-value =  $1.212 \times 10^{-8}$

**12.4.4** fit: 7254.651, lower: 6754.55, upper: 7754.752

#### **12.5.3** (5302, 9207)

## 12.6.5

Table 2: Analysis of variance table

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F-statistic	p-value
Regression	1	$10.71 \times 10^{7}$	$10.71 \times 10^7$	138.29	0.0
Error	14	$1 \times 10^{7}$	774,211		
Total	15	$11.79 \times 10^{7}$			

**12.7.1** No.

**12.11.14** Yes.