

5.3 Homework
Problem

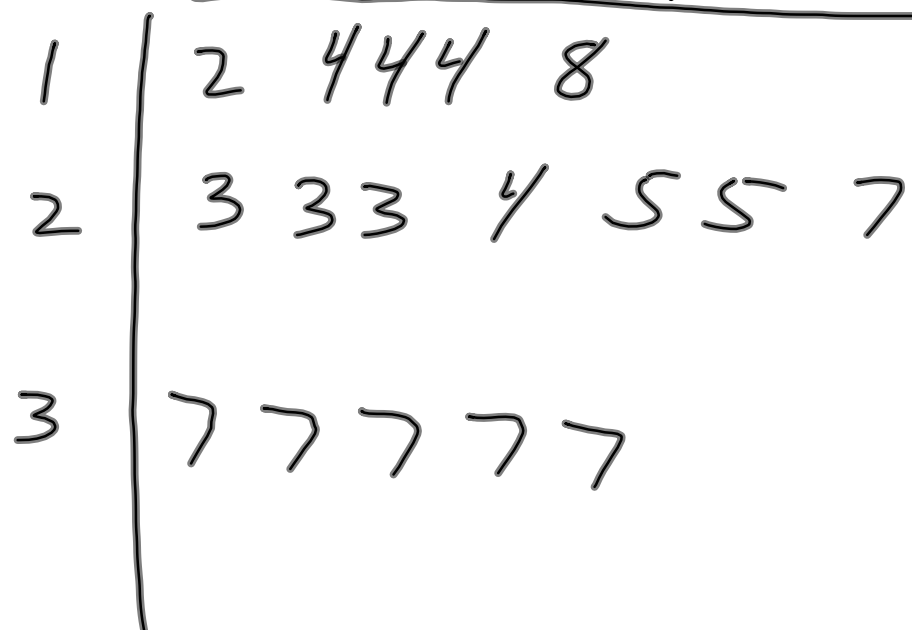
Make a frequency chart and then a stem and leaf plot from the following data:

23, 37, 12, 14, 37, 25, 27, 37, 14, 14, 18, 25, 23, 37, 24, 23, 37

Find the mean, median, mode, and range.

Find the IQR and outliers

<u>amount</u>	<u>Frequency</u>	<u>Total</u>
12	1	12
14	3	42
18	1	18
23	3	69
24	1	24
25	2	50
27	1	27
37	5	185
	<u>17</u>	<u>427</u>

Stem and Leaf Plot

$$2/3 = 23$$

$$\text{mean} = \frac{427}{17} = 25$$

$$\text{median} = 24$$

$$\text{mode} = 37$$

$$\text{range} = 25$$

$$Q_2 = 24$$

$$Q_3 = 37$$

$$\text{IQR} = 37 - 16$$

$$Q_1 = \frac{14 + 18}{2} = 16$$

$$Q_4 = 37$$

$$= 21$$

Outliers: Lower: $16 - 1.5(21) = -15.5$

Upper: $37 + 1.5(21) = 68.5$

