Diet	Wtloss
A	3,709
A	7,087
A	6,754
A	8,994
A	9,077
A	6,413
A	5,877
A	2,572
A	7,520
A	6,881
A	7,265
A	3,477
A	3,755
A	8,760
A	7,032
A	9,052
A	10,062
A	4,840
A	6,449
A	9,019
A	-1,715
A	4,718
A	4,007
A	7,241
A	2,128
A	6,968
A	4,853
A	0,055
A	2,680
A	3,746
A	7,033
A	5,033
A	5,569
A	6,712
A	3,663
A	2,741
A	6,256
A	5,349
A	7,300
A	5,445
A	4,970
A	3,613
A	7,568
A	5,861
A	4,157
A	0,203
A	4,441
A	5,875
A	5,715
A	0,280
B	-1,087
B	1,819
B	0,074
B	1,755
B	1,889
B	3,089
B	4,008
B	4,551
B	1,372
B	3,413
B	-4,148
B	2,823
B	2,865
B	4,369
B	6,337
B	6,308
B	3,494
B	10,539
B	3,840
B	5,123
B	5,485
B	-1,894
B	8,016
B	2,310
B	3,882
B	7,030
B	7,727
B	0,105
B	3,650
B	4,547
B	4,985
B	5,159
B	4,760
B	4,934
B	3,106
B	5,598
B	2,162
B	6,520
B	7,046
B	1,757
B	1,848
B	1,096
B	2,145
B	8,435
B	6,099
B	3,972
B	2,409
B	0,569
B	7,013
B	2,594

Diet A

n	50
Mean	5,341
SD	2,536
Median	5,642
Q1	3,748
Q3	7,033
IQR	3,285

Diet B

n	50
Mean	3,710
SD	2,769
Median	3,745
Q1	1,953
Q3	5,404
IQR	3,451

Exercise 8.2b

Sample sizes for both diets are the same (50).

Diet A has a Mean weight loss of 5.341kg, whereas diet B, has a Mean of 3.710kg.

Diet A has a Standard Deviation (SD) of 2.536kg, compared to Diet B with an SD of 2.769 kg.

Diet A has an Interquartile range (IQR) between Q1 and Q3 of 3.285kg, compared to Diet B with an IQR of 3.451kg.

Diet A SD value shows that the variation in weight loss was more closely centered or clustered around the Mean, but for Diet B, the variation in people to get the mean value was less clustered, and was more spread out over the sample population.

IQR shows the amount of variation between the 2 quartiles.
The numbers show that between Q1 and Q3 in Diet A, there is less variation in weight loss inthe population, than that shown between Q1 and Q3 in Diet B.

Taken together, the SD values and the IQR values, support the suggestion that the population using Diet A, were more closely clustered around the Mean than those using Diet B.

To summarise, it appears that both diets were effective for weight loss, but those following Diet A, lost more on average, than those people following Diet B.