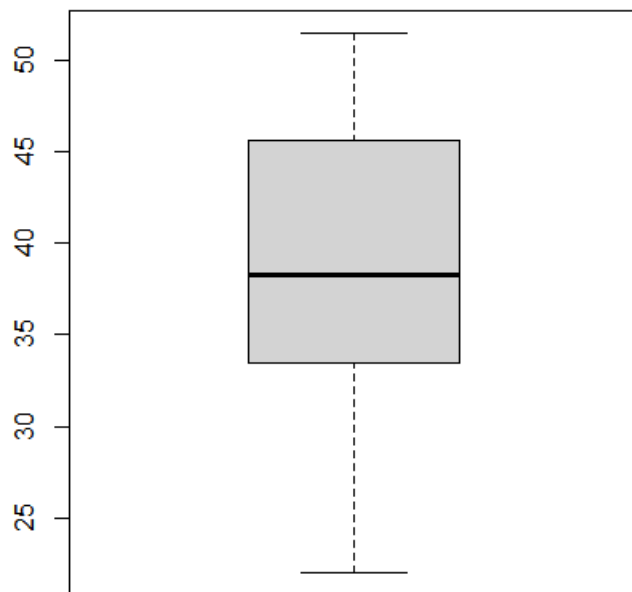


4. (Slightly modified version of Ex 7-49 on p 297) For each of 18 preserved cores from oil-wet carbonate reservoirs, the amount of residual gas saturation after a solvent injection was measured at water flood-out. Observations, in percentage of pore volume, were

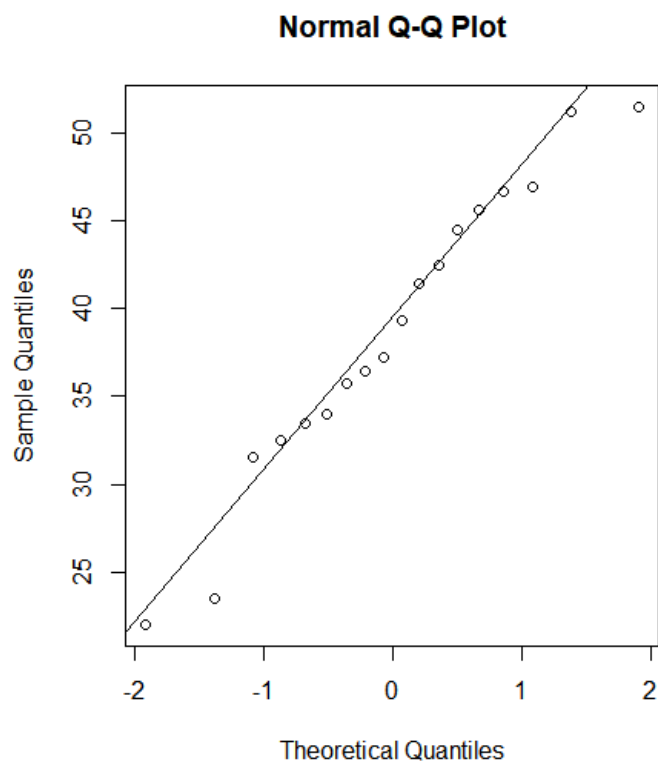
23.5 31.5 34.0 46.7 45.6 32.5 41.4 37.2 42.5
 46.9 51.5 36.4 44.5 35.7 33.5 39.3 22.0 51.2

- a) Construct a boxplot of this data, and comment on any interesting features.



Min	1Q	Median	Mean	3Q	Max	IQR
22.00	33.62	38.25	38.66	45.33	51.50	11.71

b) Is it plausible that the sample was selected from a normal population distribution?



Excluding the extreme value, since the data are distributed close to the approximate line, it can be said that it follows the normal distribution.

c) Calculate a 98% CI for the true average amount of residual gas saturation.