

2. The following are the founding dates of wineries in New Zealand:

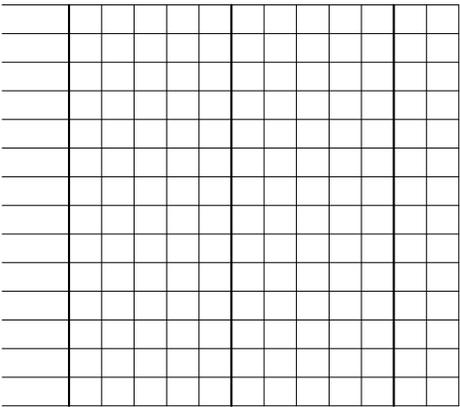
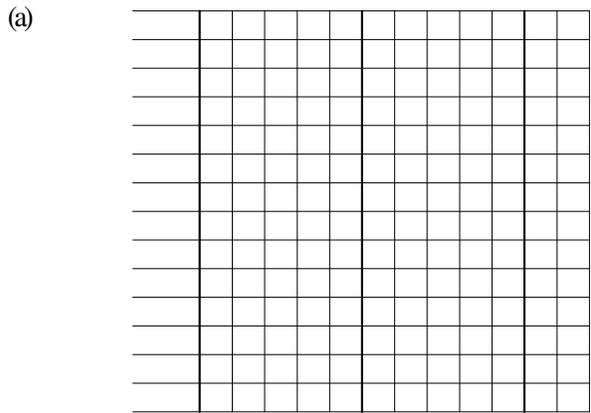
1975 1980 1973 1974 1943 1902 1947 1942 1937 1983
 1934 1936 1935 1902 1937 1961 1979 1969 1976 1925
 1922 1937 1973 1933 1948 1944 1904 1981 1872 1918
 1860 1960 1876 1980 1967 1974 1977 1979 1981 1978;

MARKS

8

for these data: $\sum_{j=1}^n y_j = 77,874$; $\sum_{j=1}^n y_j^2 = 151,651,440$; $n = 40$.

- (2, 2, 2, 2)
- (a) Construct a stemplot (with *ordered leaves*) of these data, using the grid(s) below.
 - (b) Find the average, median, standard deviation and IQR for the data.
 - (c) Explain briefly how the numerical summaries in (b) are useful in describing important features of the data.
 - (d) On the basis of your answers to (a), (b) and (c), outline (*in 100 words or fewer*) what these data indicate about the times at which wineries were founded in New Zealand.



- (b)
- (b)

Average

(b)

Median

(b)

Standard deviation

(b)

IQR

(c)

(d)