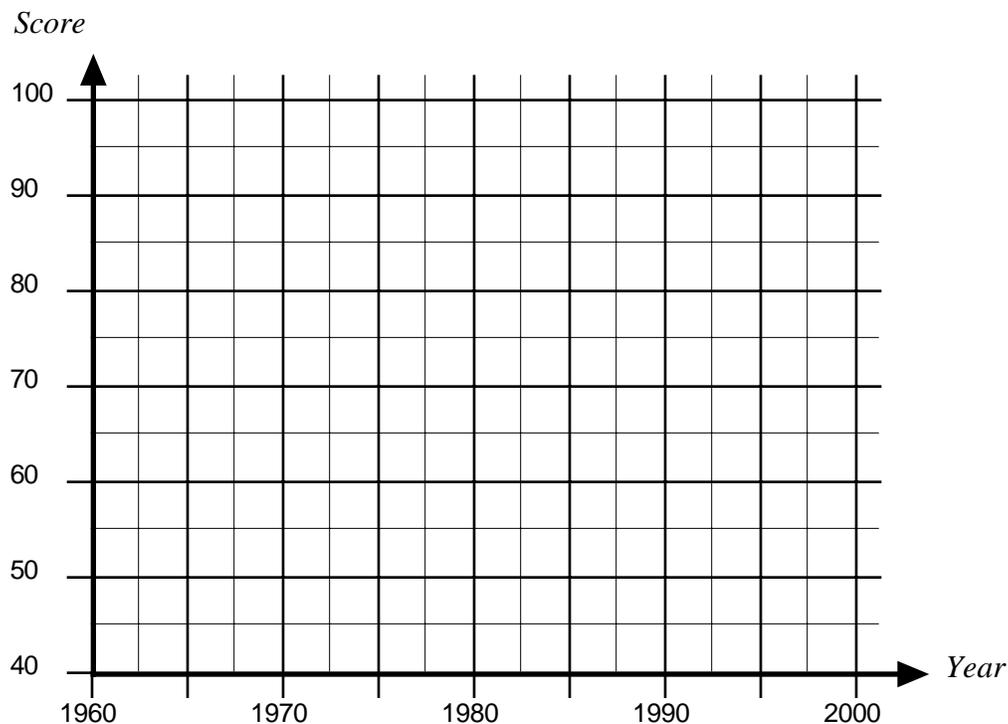Many food and wine magazines rank the quality of wine on a scale of 1 to 100, 100 being the finest. A developing California vineyard kept track of the some of the scores that its Chardonnay wines received, and these scores are listed in Table 1 below.

Vintage	1977	1982	1983	1985	1990	1993
Score	72	78	82	90	85	90

Table 1: Scores for California chardonnay 1977-1993.

- *Plot the data from Table 1 on a graph of score versus year. Use your plot to estimate the score that the 1980 vintage would have received.*

Score

- *Find an equation relating vintage and score. What features of your graph suggest a form for the equation?*

- *Using your formula, what score would you predict for the vineyard's 1980 Chardonnay?*

- *The vineyard started to produce Chardonnay in 1969. According to your formula, what score did that vintage achieve? How reliable do you think this figure is, based on the appearance of your graph?*

- *Vineyards that consistently produce wines which score 95 or above are regarded as elite. In a speech to wine growers, the owner of the vineyard confidently stated that by 1997, this vineyard would rank amongst the elite. Do you think these claims are valid or not ?*