

2 In 1886, Sir Francis Galton claimed that the height of a child could be predicted by working out the mean height of its parents.

Scientists have since discovered that the inheritance of height is an example of polygenic inheritance.

(a) Explain what is meant by the term **polygenic inheritance**.

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(b) Some scientists have suggested that diet may affect the growth of a child.

Explain how the height of an adult human demonstrates how environmental factors interact with genotype.

(3)

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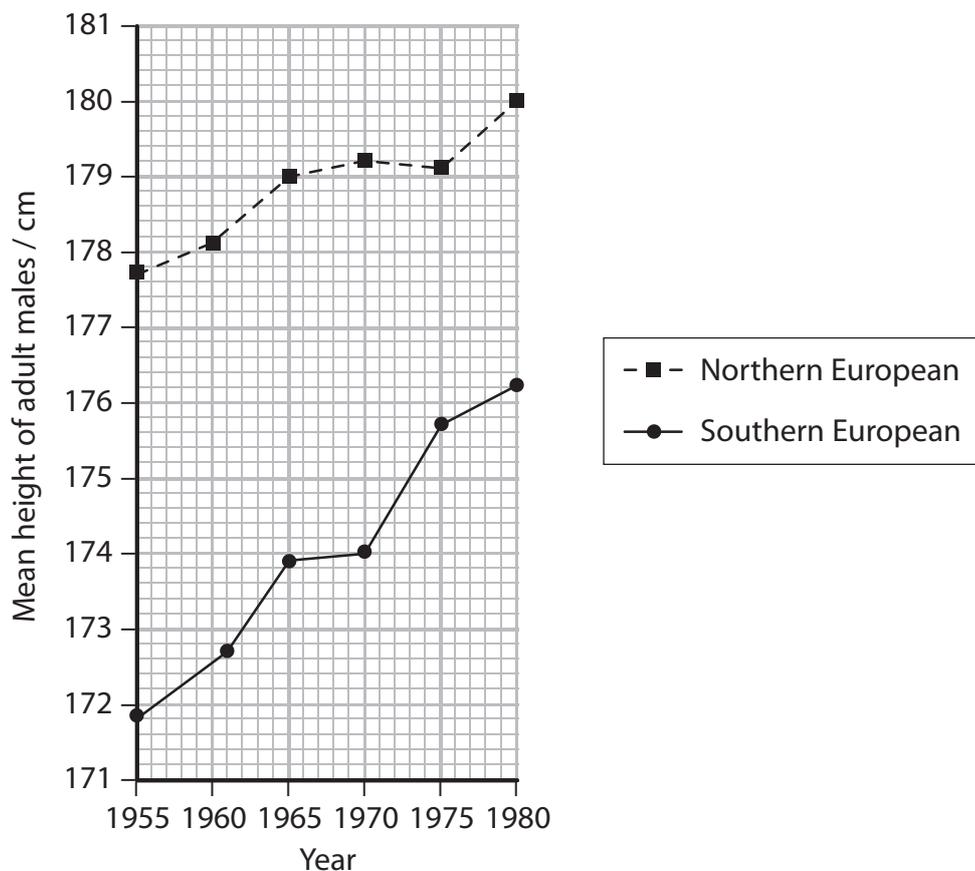
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(c) The graph below shows the mean height of populations of adult males in Northern and Southern Europe from 1955 to 1980.



(i) Using the information in the graph, describe the changes in mean height for adult European males from 1955 to 1980.

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(ii) Suggest an explanation for the changes in mean height of these two groups of adult males.

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**(Total for Question 2 = 10 marks)**

