

Solutions

Each answer shows the steps, then the **result**.

2.1

- how much of the variation between people comes from genes and how much from environment; and how the two interact, since both always contribute

2.2

- they share (nearly) all their genes but not their environments; so a similarity between them points to a genetic influence rather than a shared upbringing

2.3

(a)

- the proportion of variation in height **within that population** attributable to genetic differences

(b)

- it does not mean 80% of any one person's height is caused by genes

3.1 C

- fraternal twins are ordinary siblings who share a birth, so about half

3.2 B

- heritability is a ratio; reducing environmental variation raises the genetic share without any genetic change

3.3

(a)

- it explains the preference as an adaptation that raised survival or reproduction in ancestral environments

(b)

- such explanations are hard to test directly, since the ancestral environment cannot be observed