

The heights,  $x$  m, of a random sample of 50 adult males from country  $A$  were recorded. The heights,  $y$  m, of a random sample of 40 adult males from country  $B$  were also recorded. The results are summarised as follows.

$$\Sigma x = 89.0 \quad \Sigma x^2 = 159.4 \quad \Sigma y = 67.2 \quad \Sigma y^2 = 113.1$$

Find a 95% confidence interval for the difference between the mean heights of adult males from country  $A$  and adult males from country  $B$ . [8]