A company produces packets of sweets. Two different machines, A and B, are used to fill the packets. The manager decides to assess the performance of the two machines. He selects a random sample of 50 packets filled by machine A and a random sample of 60 packets filled by machine B. The masses of sweets, x kg, in packets filled by machine A and the masses of sweets, y kg, in packets filled by machine B are summarised as follows.

$$\Sigma x = 22.4 \qquad \Sigma x^2 = 10.1 \qquad \Sigma y = 28.8 \qquad \Sigma y^2 = 16.3$$

A test at the $\alpha\%$ significance level provides evidence that the mean mass of sweets in packets filled by machine A is less than the mean mass of sweets in packets filled by machine B. Find the set of possible values of α. [12]