Ansal is investigating the wingspans of Monarch butterflies in two different regions, X and Y. He takes a random sample of 8 Monarch butterflies from region X and records their wingspans, x cm. His results are as follows.

$$8.2 \quad 7.0 \quad 7.3 \quad 8.8 \quad 7.8 \quad 8.5 \quad 9.2 \quad 7.4$$

Ansal also takes a random sample of 9 Monarch butterflies from region Y and records their wingspans, y cm. His results are summarised as follows.

$$\sum y = 71.10 \qquad \sum y^2 = 567.13$$

Ansal suspects that the mean wingspan of Monarch butterflies from region X is greater than the mean wingspan of Monarch butterflies from region Y. It is known that the wingspans of Monarch butterflies in regions X and Y are normally distributed with equal population variances.

Test, at the 10% significance level, whether Ansal's suspicion is supported by the data. [8]