Two fish farmers X and Y produce a particular type of fish. Farmer X chooses a random sample of 8 of his fish and records the masses, x kg, as follows.

1.2 1.4 0.8 2.1 1.8 2.6 1.5 2.0

Farmer Y chooses a random sample of 10 of his fish and summarises the masses, y kg, as follows.

$$\Sigma y = 20.2 \qquad \Sigma y^2 = 44.6$$

You should assume that both distributions are normal with equal variances. Test at the 10% significance level whether the mean mass of fish produced by farmer X differs from the mean mass of fish produced by farmer Y. [10]