Applicants for a particular college take a written test when they attend for interview. There are two different written tests, *A* and *B*, and each applicant takes one or the other. The interviewer wants to determine whether the medians of the distribution of marks obtained in the two tests are equal. The marks obtained by a random sample of 8 applicants who took test *A* and a random sample of 8 applicants who took test *B* are as follows.

Test *A*	46	32	29	12	33	18	25	40
Test *B*	36	28	49	37	48	35	41	31

(a) Carry out a Wilcoxon rank-sum test at the 5% significance level to determine whether there is a difference in the population median marks obtained in the two tests. [6]

The interviewer considers using the given information to carry out a paired sample *t*-test to determine whether there is a difference in the population means for the two tests.

(b) Give two reasons why it is not appropriate to use this test. [2]