1 A mass is dropped from rest and falls through a distance of 2.0 m in a vacuum. An observer records the time taken for the mass to fall through this distance using a manually operated stopwatch and repeats the measurements a further two times. The average result of these measured times, displayed in the table below, is used to determine a value for the acceleration of free fall. This is calculated to be 9.8 m s^{-2}.

	first measurement	second measurement	third measurement	average
time / s	0.6	0.73	0.59	0.64

Which of the following statement best relate to the experiment?

A The measurements are precise and accurate with no evidence of random errors.

B The range of results shows that there are no random errors made but the calculated value for acceleration of free fall is accurate, so the experiment was successful.

C The measurements are not always recorded to the degree of precision of the measuring device but the calculated value for acceleration of free fall is accurate. Systematic errors may be present.

D The measurements are not always recorded to the degree of precision of the measuring device but the calculated value for acceleration of free fall is accurate. Random errors may be present.