**2** A student was given a box of identical glass microscope slides and asked to determine the density of the glass. She used a micrometer to measure the thickness of one of the slides. She repeated this measurement twice in different places and calculated a mean value for the thickness. The thickness of each slide was approximately 1 mm.

(a) Explain how she should have measured the thickness of the slides in order to minimise the percentage uncertainty.

**(2)**

(b) In her report she wrote

*"My value for the mass of the glass slides was precise, because I measured the mass using an electronic balance which was accurate to the nearest 0.01g. I reduced the effect of random error by repeating the measurement several times."*

Comment on this statement.

**(4)**

**(Total for Question 2 = 6 marks)**