

- 1 The length of a piece of paper is measured as  $280 \pm 1$  mm. Its width is measured as  $230 \pm 2$  mm. Area  $A$  is the area of one side of the piece of paper.

(a) State the value of  $A$  and its actual uncertainty to the appropriate number of significant figures.

$A = \dots\dots\dots \pm \dots\dots\dots \text{ mm}^2$  [3]

- (b) The accepted value of  $A$  is  $8.00 \times 10^4 \text{ mm}^2$ .

Use your answer in (a) to distinguish between *accuracy* and *precision*.

accuracy .....

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precision .....

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..... [2]

[Total: 5]