

- 2** A student uses a metre rule to measure the length of an elastic band before and after stretching it.

The lengths are recorded as

$$\text{length of band before stretching, } L_0 = 50.0 \pm 0.1 \text{ cm}$$

$$\text{length of band after stretching, } L_S = 51.6 \pm 0.1 \text{ cm.}$$

Determine

- (a) the change in length ($L_S - L_0$), quoting your answer with its uncertainty,

$$(L_S - L_0) = \dots \text{ cm} \quad [1]$$

- (b) the fractional change in length, $\frac{(L_s - L_0)}{L_0}$,

fractional change = [1]

- (c) the uncertainty in your answer in (b).

uncertainty = [3]