ANSWERS

Give answers to 1 decimal place．

## Section A

Work out the percentage change for the amounts shown．

| Original Amount | New Amount | \％Change |
| :---: | :---: | :---: |
| 10 m | 12 m | $20 \%$ |
| $£ 8.99$ | $£ 13.99$ | $55.6 \%$ |
| 560 kg | 499 kg | $-10.9 \%$ |
| 0.031 lb | 0.032 lb | $3.2 \%$ |

## Section B

1）When $150 \mathrm{~cm}^{3}$ of water freezes， $162 \mathrm{~cm}^{3}$ of ice is formed．
Calculate the percentage increase in the volume．8\％

2）Adrian buys a DVD for £19．99．
Three months later Adrian sells the DVD for £12．99．
What is the percentage loss？ $35.0 \%$
3）At the start of April a puppy weighed 11.3 kg ．In April it grew by $12 \%$ ．
At the start of June the puppy weighed 14.8 kg ．
What was the percentage growth in May？16．9\％
4）When a discount is added to the cost of a car，its price decreases from $£ 14$＇ 000 to $£ 11$＇ 900 ．What percentage reduction is this？ $15 \%$

5）A rectangle has length 14 cm and width 9.5 cm ．
The length increased by $6 \%$ and the width increased by $15 \%$ ．
a．Calculate the percentage change in area of the rectangle．21．9\％
b．What is the original area as a percentage of the increased area of the rectangle？82．0\％

6）＊A shoe shop has a sale．
During the sale a pair of shoes are reduced by $30 \%$ ．
After the sale the same pair of shoes are increased by $10 \%$ ．
a．By what percentage has the value of the shoes changed from before the sale to after the sale？ 23\％
b．Are the pair of shoes cheaper or more expensive after the sale has ended than they were before the sale started？Cheaper

