

## Percentage Change



## **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 cm³ of water freezes, 162 cm³ 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%
- \* 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