SMART EXAM RESOURCES
CAMBRIDGE LOWER SECONDARY MATHS
STAGE 8
TOPIC: PERCENTAGE INCREASE/ DECREASE/ ABSOLUTE CHANGE
SET-1

1 Work out the absolute change when 45 is decreased by 300%.

..... [2]

MARK SCHEME

	–135	2	Award 1 mark for 45 × –3 or equivalent **or** for 45 × –2 or equivalent **or** for answer 135	Implied by –90

2 A new car costs $14 000
Every year it loses 18% of its value.

How much is the car worth after 2 years?

$ ..... [2]

Mark Scheme:

- The original price of the car is **$14,000**.
- Every year, the car loses **18%** of its value.
- We need to find out how much the car is worth **after 2 years**.

Step 2: Find the Value After 1 Year

Since the car loses **18%**, it keeps **(100% - 18%) = 82%** of its value each year.

This means after **1 year**, the value of the car is:

$$\text{New Value} = \text{Old Value} \times 0.82$$

$$= 14,000 \times 0.82$$

$$= 11,480$$

So, after **1 year**, the car is worth **$11,480**.

Step 3: Find the Value After 2 Years

Now, the car **again loses 18%** in the second year.
So, we multiply **$11,480** by **0.82** again:

$$= 11,480 \times 0.82$$

$$= 9,413.60$$

So, after **2 years**, the car is worth **$9,413.60**.

3 The value of Eva's car is $9000
This value decreases by 15%.

Work out the new value of Eva's car.

$ ..... [2]

Mark Scheme:

Answer	Marks	Part Marks	Guidance
($)7650	2	Award 1 mark for 9000 × 0.85 or equivalent or 1350	