

6. A small company which makes batteries for electric cars has a 10-year plan for growth.

- In year 1 the company will make 2 600 batteries
- In year 10 the company aims to make 12 000 batteries

In order to calculate the number of batteries it will need to make each year, from year 2 to year 9, the company considers two models, Model *A* and Model *B*.

In Model *A* the number of batteries made will increase by the same **number** each year.

(a) Using Model *A*, determine the number of batteries the company will make in year 2

(3)

In Model *B* the number of batteries made will increase by the same **percentage** each year.

(b) Using Model *B*, determine the number of batteries the company will make in year 2.

Give your answer to the nearest 10 batteries.

(3)

Sam calculates the total number of batteries made from year 1 to year 10 inclusive using each of the two models.

(c) Calculate the difference between the two totals, giving your answer to the nearest 100 batteries.

(3)