Higher Maths SQA 2016 Paper 2 Question 6



Scientists are studying the growth of a strain of bacteria. The number of bacteria present is given by the formula

$$B(t) = 200 e^{0.107t}$$
,

where t represents the number of hours since the study began.

- (a) State the number of bacteria present at the start of the study.
- (b) Calculate the time taken for the number of bacteria to double.

Answers:

- (a) 200
- (b) t = 6.478...

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