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

$$B(t) = 200\,e^{0\cdot107t},$$

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

(a) State the number of bacteria present at the start of the study. **1**

(b) Calculate the time taken for the number of bacteria to double. **4**

Answers:

(a) 200

(b) $t = 6\cdot478...$