**A Harder Differential Equations Question**

(Core 4 Page 237 Exercise 11F Qu 3)

Mould is spreading through a piece of cheese on mass 1 kg in such a way that at a time days, kg of the cheese has become mouldy where…

Initially 0.01 kg of the cheese is mouldy.

Show that…

And calculate after how long 0.99 kg of the cheese will be mouldy, giving your answer to the nearest hour.