

(C2-7.3a) Name:

### **Homework Questions 3 – Growth and Decay**

1. A new car is purchased for £12999. Each year it depreciates in value and it is only worth 85% of the previous year's value. The owner decides to keep the car until its value goes below £5000. After how many years will the owner get rid of the car.

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2. What is the first term in the geometric series 3, 3.6, 4.32, 5.184 to exceed 50

17

3. An oak tree is planted in 2001. If the tree is initially 2m tall and it is expected to grow at a rate of 15% per year. In what year will the tree reach 15m tall.

2015