Drug concentration

Not WoW and not IBL

A patient is ill. A doctor prescribes a medicine for this patient and advises to take a daily dose of 1500 mg. After taking the dose an average of 25% of the drug leaves the body by secretion during a day. The rest of the drug stays in the blood of the patient.

1. How much mg of the drug is in the blood of the patient after one day?
2. Finish the table.

|  |  |
| --- | --- |
| Day | Mg of drug in blood |
| 0 | 0 |
| 1 | 1125 |
| 2 |  |
| 3 |  |

1. Explain why you can calculate the amount of drug for the next day with the formula:
new\_amount = (old\_amount + 1500) \* 0,75
2. After how many days has the patient more than 4 g medicine in the blood? And after how many days 5 g?
3. What is the maximum of amount of the drug that can be reached? Explain your answer.