

F-LE Allergy medication

Task

Every day Brian takes 20 mg of a drug that helps with his allergies. His doctor tells him that each hour the amount of drug in his blood stream decreases by 15%.

- Construct an exponential function of the form $f(t) = ab^t$, for constants a and b , that gives the quantity of the drug, in milligrams, that remains in his bloodstream t hours after he takes the medication.
- How much of the drug remains one day after taking it?
- Do you expect the percentage of the dose that leaves the blood stream in the first half hour to be more than or less than 15%? What percentage is it?
- How much of the drug remains one minute after taking it?



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