

Janet's friend Marcus also wanted to figure out how much time had elapsed. He said calculating $\log_3 8$ would tell him how much time elapsed between the first two checks and $\log_3 12$ would tell him how much time elapsed between the last two checks. So, he reasons $\log_3 8 + \log_3 12 = \log_3(8 + 12) = \log_3 20$ would give him the total elapsed time. Do you agree or disagree? Justify your answer using a number line.

Grams of mold

hours

