306. For a 5-year warranty on Kira's new cell phone, you are given:

(i) The warranty pays 100 at the moment of breakage, if the phone breaks. The warranty only pays for one breakage.
(ii) If the phone has not broken, the warranty pays 100 at the end of 5 years.
(iii) Premiums of G are payable continuously at an annual rate of 25 until the phone breaks.
(iv) The force of breakage for this phone is $\mu_t = 0.02t, t \geq 0$.
(v) $\delta = 0.05$
(vi) ${}_tV$ denotes the gross premium reserve at time t for this warranty.
(vii) At the end of year 4, Kira's cell phone has not broken.
(viii) You approximate ${}_4V$ using Euler's method, with step size $h = 0.5$ and using the derivatives of ${}_tV$ at times 4.0 and 4.5.

Calculate your approximation of ${}_4V$ using this methodology.

(A) 71.0

(B) 71.4

(C) 71.9

(D) 72.4

(E) 72.8