3b

average $\sum TUID$ digits $\approx 5.55\overline{5}$

in python make a Letter $\rightarrow$ # map

"I" $\rightarrow$ 9 ... etc

$\alpha \approx 0.63\overline{3}$

$\beta \approx 0.53\overline{3}$

$\gamma = 0.5$

let $h = 0.1$?

$\dfrac{dy}{dt} = y'$ $\qquad \dfrac{dy'}{dt} = y''$ $\qquad \dfrac{dy''}{dt} = y'''$

$$= \cos(3t) - \alpha y'' - \beta y y'$$

Intermediate Slope (K_{1-4})

$$k_1 = h \times f\left(t_n, y_n\right)$$

$$k_2 = h \times f\left(t_n + \frac{h}{2}, y_n + \frac{k_1}{2}\right)$$

$$k_3 = h \times f\left(t_n + \frac{h}{2}, y_n + \frac{k_2}{2}\right)$$

$$k_4 = h \times f\left(t_n + \frac{h}{2}, y_n + k_3\right)$$

lets program :)