A system of linear equations is called inconsistent if it has no solutions. A system which has a solution is called consistent.

The system can be inconsistent even with only $n = 3$.

put the system of equations into an augmented matrix.

$$\left[\begin{array}{ccc:c} 1 & t_1 & -\frac{1}{2}t_1^2 & \gamma_1 \\ 1 & t_2 & -\frac{1}{2}t_2^2 & \gamma_2 \\ 1 & t_3 & -\frac{1}{2}t_3^2 & \gamma_3 \end{array}\right] \xrightarrow{\text{find RREF}}$$

$$\left[\begin{array}{ccc:c} 1 & t_1 & -\frac{1}{2}t_1^2 & \gamma_1 \\ 0 & t_2-t_1 & -\frac{1}{2}(t_2-t_1)(t_2+t_1) & \gamma_2-\gamma_1 \\ 0 & 0 & -\frac{1}{2}(t_2-t_1)(t_3-t_1)(t_3-t_2) & (\gamma_3-\gamma_1)(t_2-t_1)-(\gamma_2-\gamma_1)(t_3-t_1) \end{array}\right]$$

When $t_1 = t_2$ or $t_3 = t_1$ or $t_3 = t_2$, but

$\gamma_1 \neq \gamma_2$ or $\gamma_3 \neq \gamma_1$ or $\gamma_3 \neq \gamma_2$,

the equation becomes $0 = C$ $(C \neq 0)$.

So the system will be inconsistent.