Before we used ode45 only for autonomous systems.
Here once you rewrite equation as a second-order system, there is
time dependence on the RHS (i.e. it's not autonomous).
To use ode45 the same way we did before, you can treat it as a 3-dim system,
where time is a new independent variable z:
$x' = y$
$y' = g(x,y,z)$
$z' = 1$

(here x = theta, y = theta', z = time).

What changes in the code:
- you have to give initial conditions $z = 0$ at $t = 0$
- in the program that computes the RHS, the vector of the RHS is 3-dimensional and the third component = 1.

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