4.9. Solve for the motion of the double-pendulum (Example 4.12) if the initial condition is zero, $\mathbf{x}(0) = \mathbf{0}$, and the input torque is a unit step function, $u(t) = u_s(t)$.

4.10. For the wing-rock dynamics of Example 4.13, solve for the *bank angle*, $x_1(t)$, and *roll-rate*, $x_2(t)$, if the initial condition is zero, $\mathbf{x}(0) = \mathbf{0}$, and the *desired aileron input* is a unit step function, $u(t) = u_s(t)$.

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