Example 3, continued
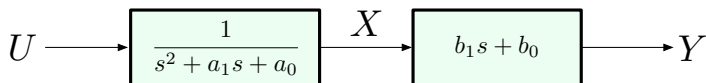
Step 1: decompose $H(s) = \dfrac{1}{s^2 + a_1 s + a_0} \cdot (b_1 s + b_0)$

Step 2: The transformation $U \to X$ is from Example 2: