

Original-Notation

Xcos-Notation

$$x \leftrightarrow t$$

$$f(x) \leftrightarrow x_1(t)$$

$$g(x) \leftrightarrow x_2(t)$$

$$f'(x) = g'(x) + \sin x \leftrightarrow \frac{dx_1}{dt} = \frac{dx_2}{dt} + \sin t$$

$$g''(x) = f'(x) - \cos x \leftrightarrow \frac{d^2x_2}{dt^2} = \frac{dx_1}{dt} - \cos t$$

$$f(0) = 1 \leftrightarrow x_1(0) = 1$$

$$g(0) = 5 \leftrightarrow x_2(0) = 5$$

$$g'(0) = \frac{1}{2} \leftrightarrow \left. \frac{dx_2}{dt} \right|_{t=0} = \frac{1}{2}$$