



$$\begin{aligned}
 u_1(t) &= \sin(2\pi t) \\
 u_2(t) &= \frac{1}{2}\sqrt{2} \sin\left(2\pi t - \frac{1}{6}\pi\right) \\
 u_3(t) &= \frac{1}{2} \sin\left(2\pi t + \frac{1}{6}\pi\right)
 \end{aligned}
 \tag{1}$$