$\mathbf{Hw8}$

- 1 Determine ω_0 , R, and δ so as to write the given expression in the form $u = R \cos(\omega_0 t \delta)$.
 - (1) $u = 3\cos(2t) + 4\sin(2t);$
 - (2) $u = -3\cos(2t) + 4\sin(2t)$.
- 2. A mass weighting 2 lb stretches a spring 6 in. If the mass is pulled down an additional 3 in and then released, and if there is no danping, determine the position u of the mass at any time t, Find the frequency, period, amplitude, and phase of the motion.