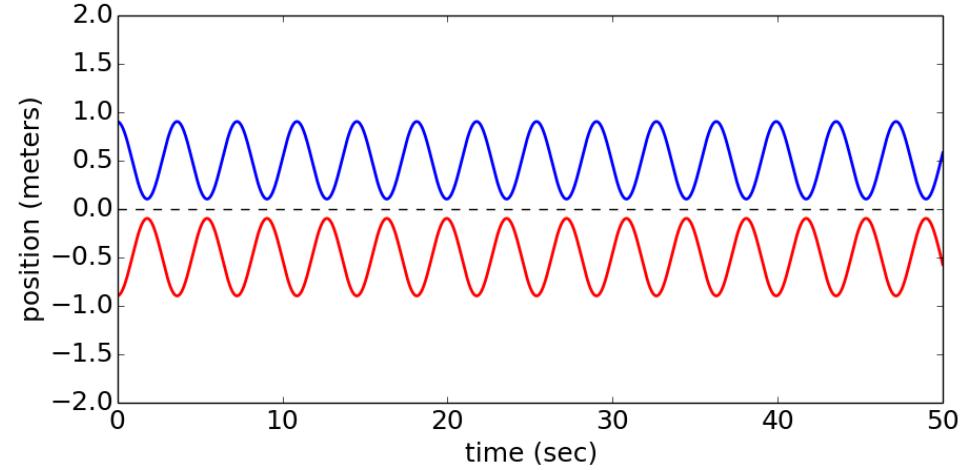
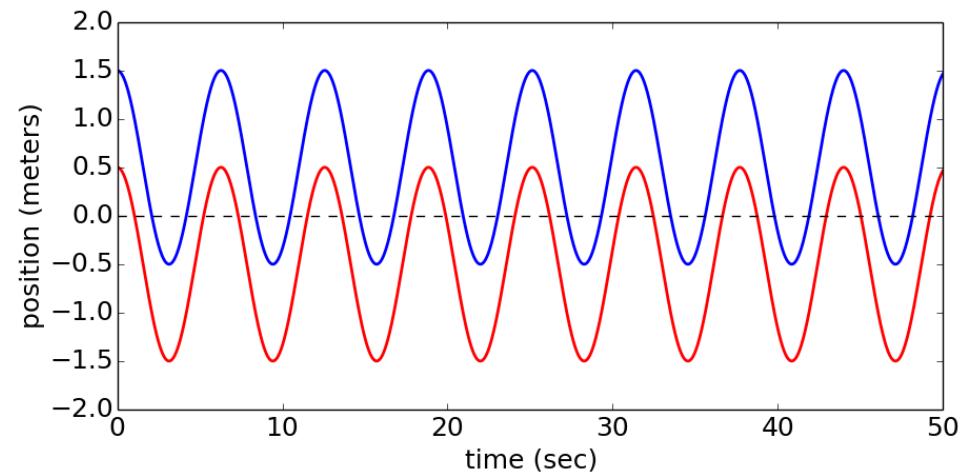
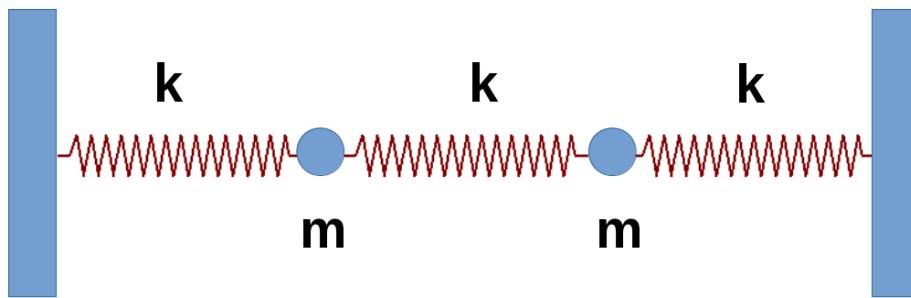
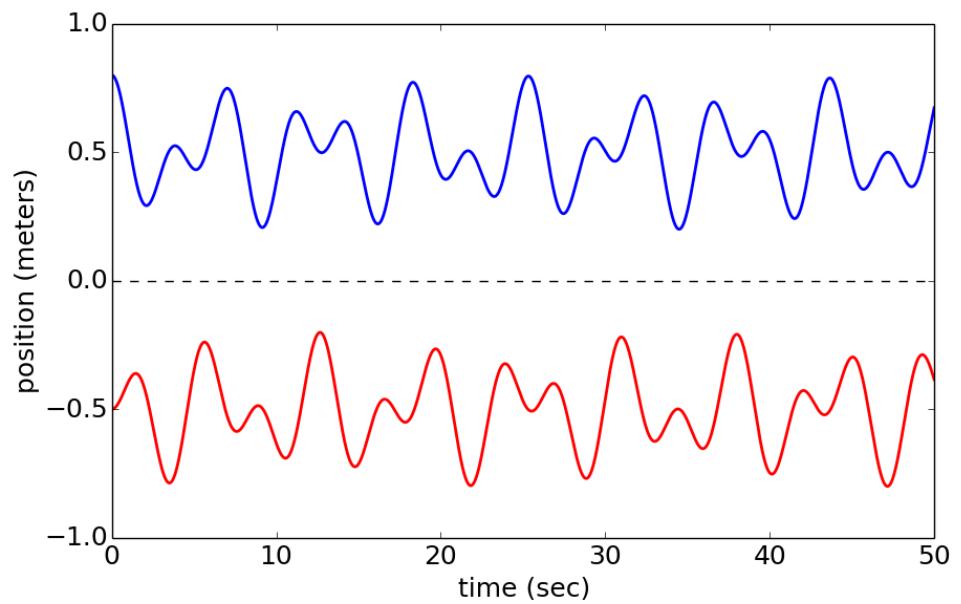
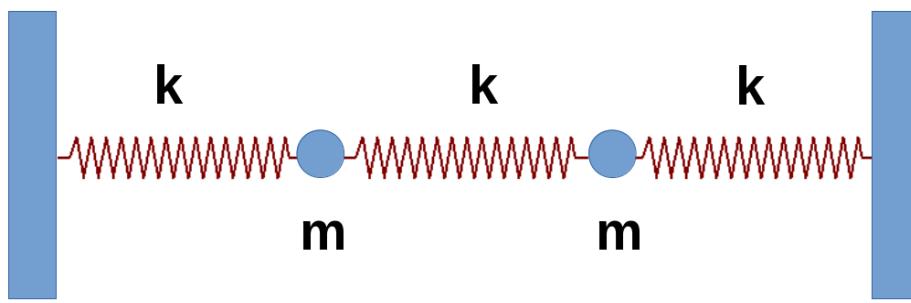


Coupled Oscillations, Normal Modes



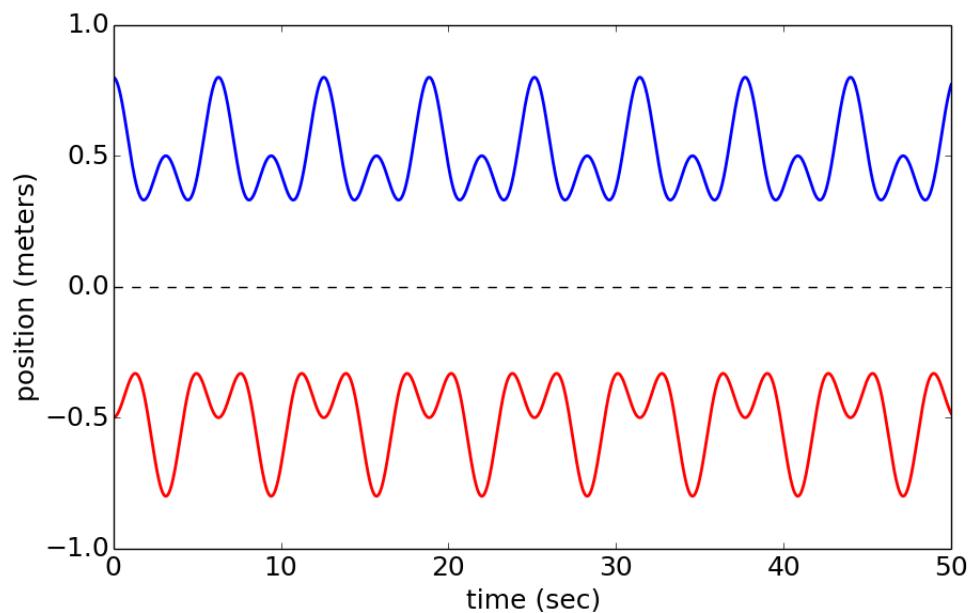
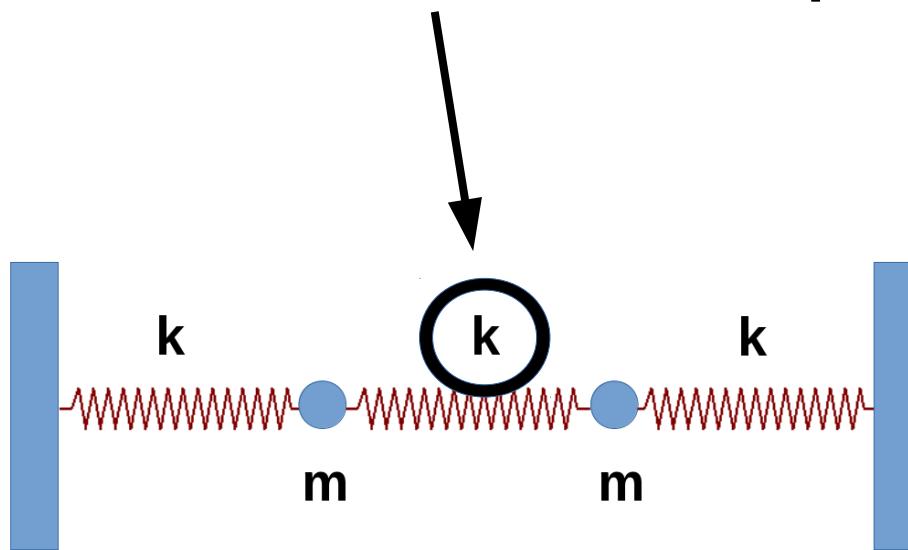
Normal Modes of the System



Solution for:

- $X_1(0) = 0.3 \text{ m}$
- $V_1(0) = 0$
- $X_2(0) = 0$
- $V_2(0) = 0$

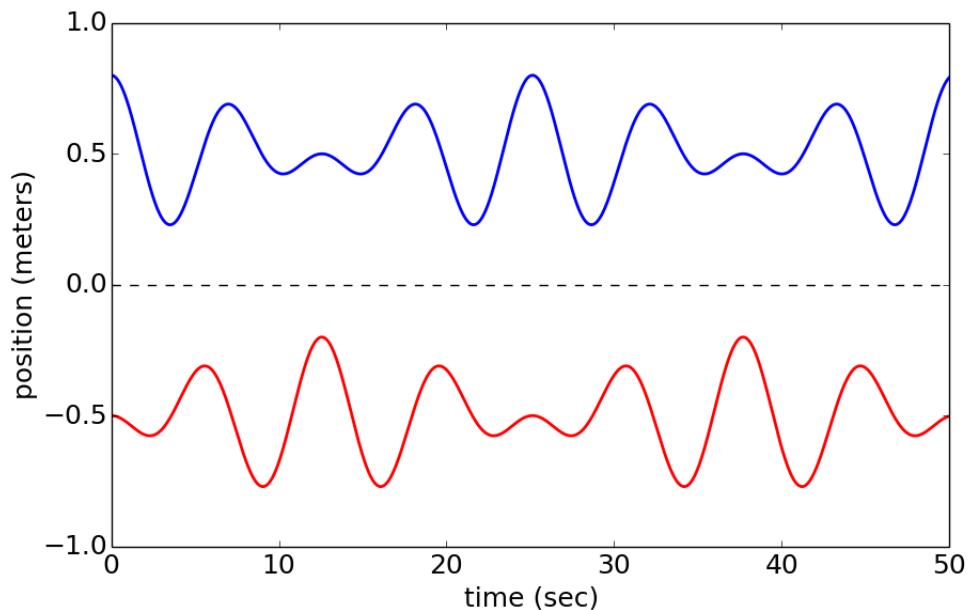
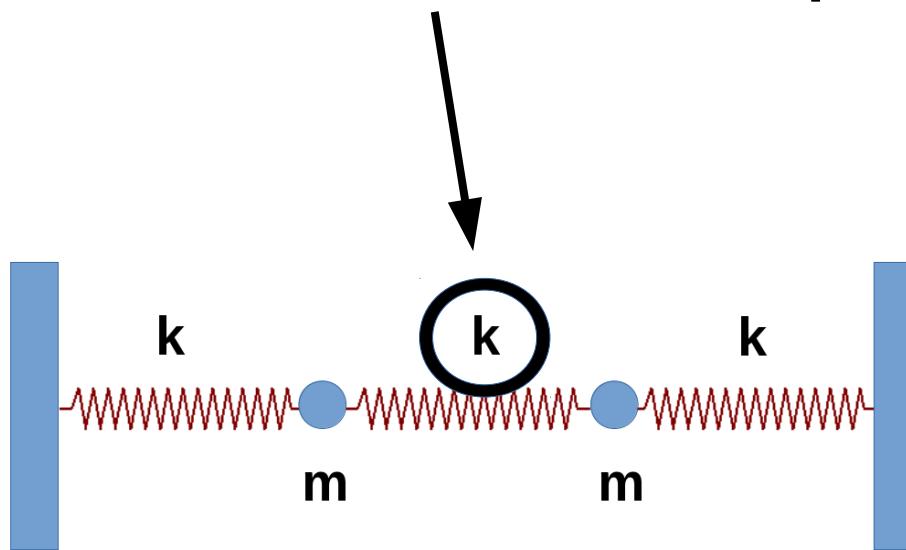
“Tune” middle spring constant $3^{1/2}\omega \rightarrow 2\omega$



Solution for:

- $X_1(0) = 0.3 \text{ m}$
- $V_1(0) = 0$
- $X_2(0) = 0$
- $V_2(0) = 0$

“Tune” middle spring constant $3^{1/2}\omega \rightarrow 3\omega/4$



Solution for:

- $X_1(0) = 0.3 \text{ m}$
- $V_1(0) = 0$
- $X_2(0) = 0$
- $V_2(0) = 0$