

Diagram 1 shows a mechanical system with a pivot at A. A rod AB of length $3m$ and mass m is at an angle. A spring with stiffness k is attached to B and a vertical guide. A rod BC of length $2l$ is attached to B and a mass m at C. A spring with stiffness $2k$ is attached to D and a fixed support.

Diagram 2 shows a mechanism with a rotating rod AB of length $4m$ and mass m at angular velocity $\omega = \text{const}$. A rod BC of length $2m$ is attached to B and a mass m at C. A rod CD of length $2l$ is attached to C and a mass m at D. A rod DE of length $2l$ is attached to D and a mass m at E. A rod EF of length $2l$ is attached to E and a mass m at F. A rod FD of length $2l$ is attached to F and D.

Diagram 3 shows a mechanism with a rotating rod AB of length $4m$ and mass m at angular velocity $\omega = \text{const}$. A rod BC of length $2m$ is attached to B and a mass m at C. A rod CD of length $2l$ is attached to C and a mass m at D. A rod DE of length $2l$ is attached to D and a mass m at E. A rod EF of length $2l$ is attached to E and a mass m at F. A rod FD of length $2l$ is attached to F and D.