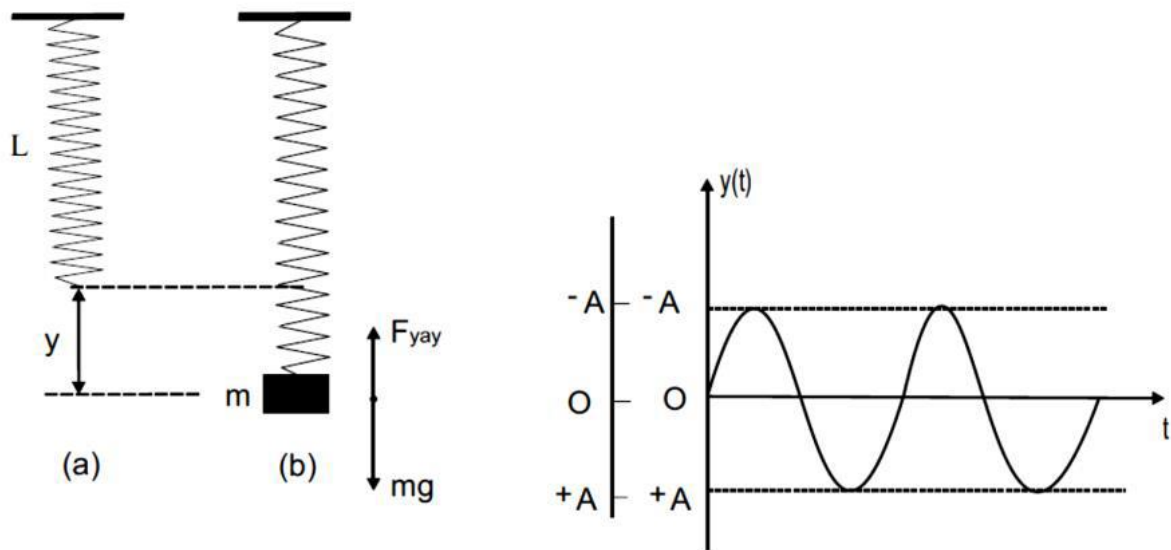


Determination of Spring Constant



$$T = 2\pi\sqrt{\frac{m}{k}}$$

1. Measure the initial length of the spring.
2. Hang the mass m at the end of the spring and measure the equilibrium length of the spring.
3. Pull it down from the equilibrium position and release the system.
4. Measure the elapsed time for $N=10$ oscillations.
5. Determine the period by timing oscillations
6. Calculate the spring constant using Hooke's Law.
7. Calculate the period by using spring constant value.
8. Compare the period values and calculate percentage difference.