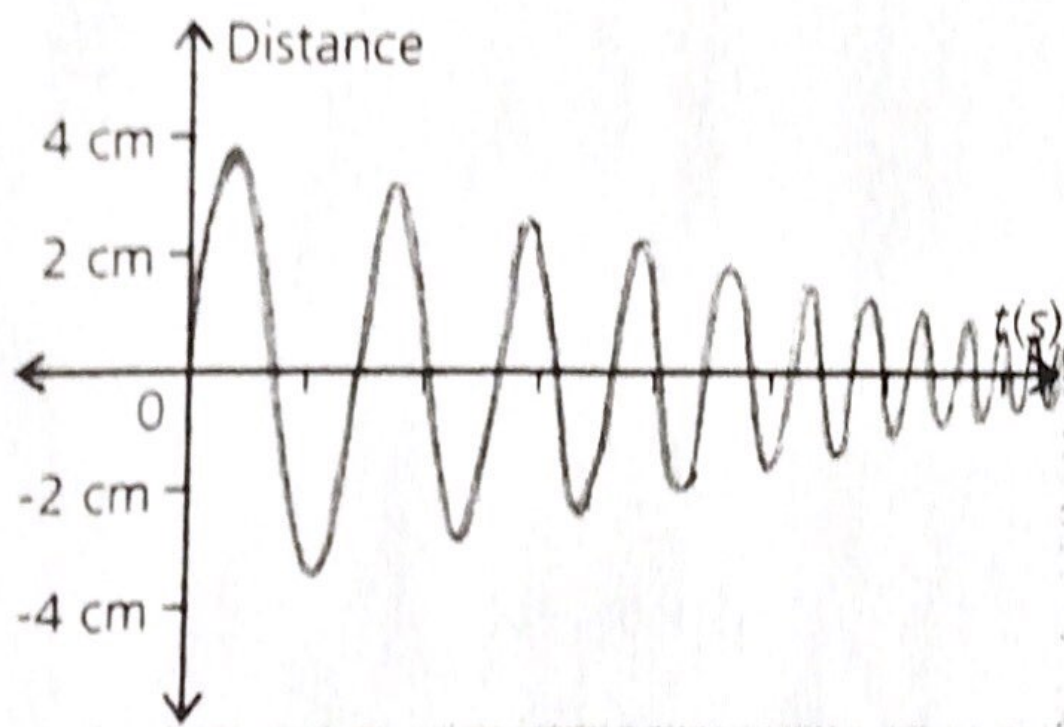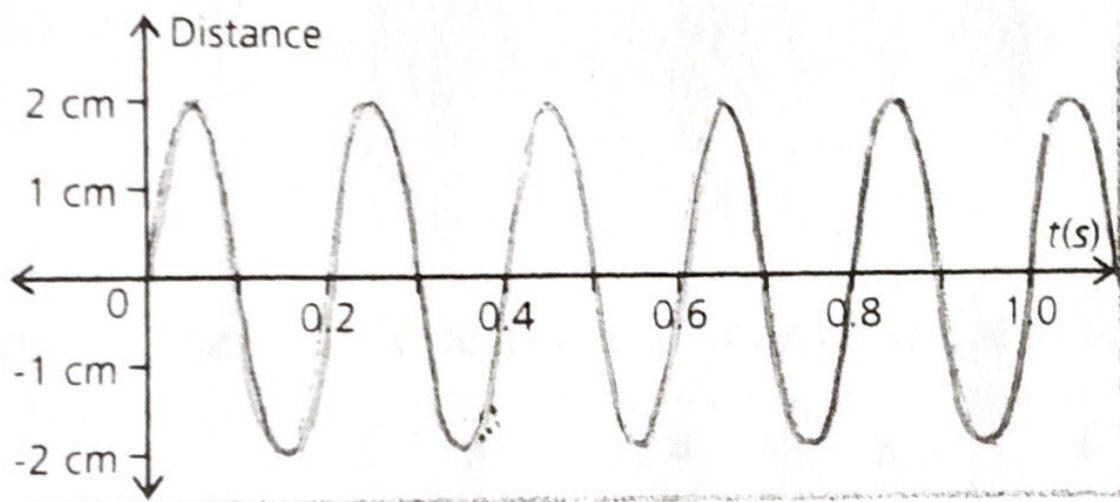## (a) tip of vibrating meter stick
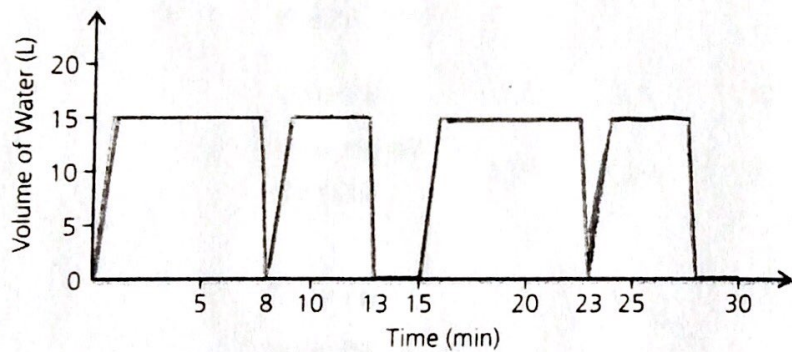
(b) movement of a piston in a combustion engine

Example 2

The automatic dishwasher in a school cafeteria runs constantly through lunch.
The graph shows the amount of water used as a function of time.

(a) Explain why the operation of the dishwasher is an example of a periodic function.

(b) What is the length of the period? What does one complete cycle mean in the context of the question?

(c) Extend the graph for one more complete cycle.

(d) How much water is used if the dishwasher runs through eight complete cycles?