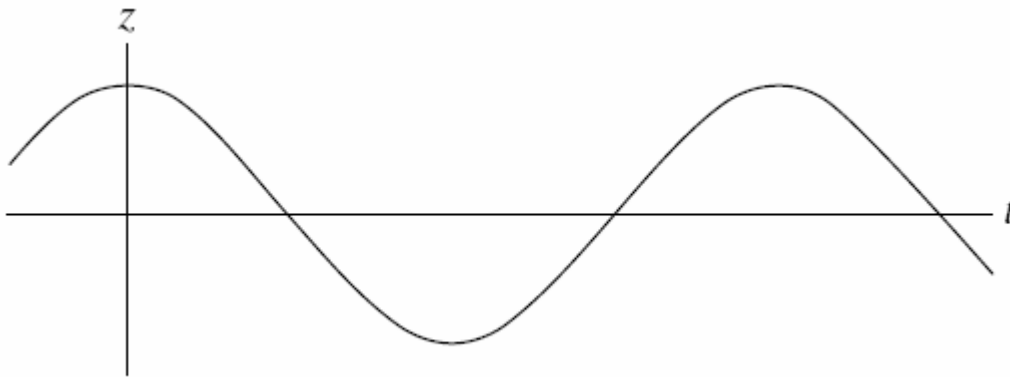


A mass suspended from a spring is oscillating up and down as indicated.

Consider two possibilities:

(i) at some point during the oscillation the mass has zero velocity but is accelerating (positively or negatively);

(ii) at some point during the oscillation the mass has zero velocity and zero acceleration.



1. Both occur sometime during the oscillation.
2. Neither occurs during the oscillation.
3. Only (i) occurs.
4. Only (ii) occurs.