



Consider the above mass-spring system, where the mass oscillates according to the SHM $x = A \cos(\omega t + \phi)$.

Locate the point on the circle which corresponds to the top figure.

- A) A_1 .
- B) A_2 .

For the top figure, so far as the location of the mass is concerned, both A_1 and A_2 are possible.

Since the velocity is positive, it limits the point A_2 to be the correct choice.

Answer **B**.