

Assume the position

An 8.0 kg particle is moving in the positive direction along the x-axis. When it passes through  $x = 0$ , a constant force directed along the x-axis opposite to the motion of the particle begins to act on it.

If the value for  $K$  at  $x = 0$  m is 30 J, what is the particle's velocity at  $x = 0$  m?

