

- 15** In a horizontal spring-mass system, a mass  $m$  oscillates with a frequency  $f$  and an amplitude  $x$ . The total energy of the oscillating system is  $E$ .

What is the total energy of a spring-mass system with a mass  $0.50\ m$ , frequency  $3.0\ f$  and amplitude  $0.40\ x$ ?

- A**  $0.24E$       **B**  $0.60E$       **C**  $0.72E$       **D**  $1.8E$