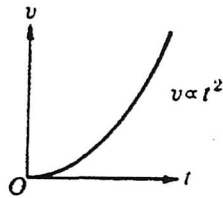
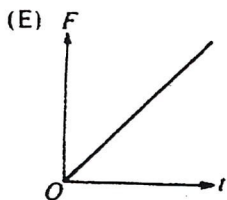
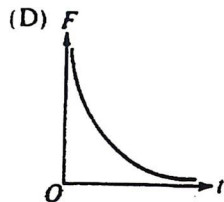
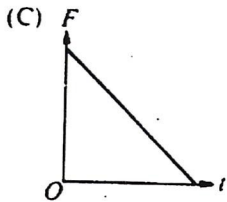
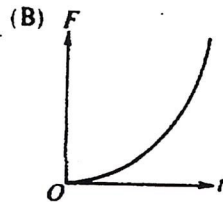
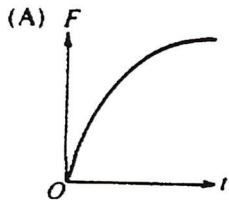


6. An ice skater is spinning about a vertical axis with arms fully extended. If the arms are pulled in closer to the body, in which of the following ways are the angular momentum and kinetic energy of the skater affected?

<u>Angular Momentum</u>	<u>Kinetic Energy</u>
(A) Increases	Increases
(B) Increases	Remains Constant
(C) Remains Constant	Increases
(D) Remains Constant	Remains Constant
(E) Decreases	Remains Constant

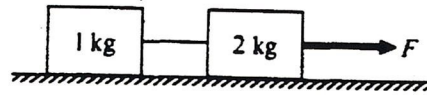


7. The parabola above is a graph of speed v as a function of time t for an object. Which of the following graphs best represents the magnitude F of the net force exerted on the object as a function of time t ?



8. An object of mass m is lifted at constant velocity a vertical distance H in time T . The power supplied by the lifting force is

- (A) $mgHT$
 (B) mgH/T
 (C) mg/HT
 (D) mgT/H
 (E) zero



9. When the frictionless system shown above is accelerated by an applied force of magnitude F , the tension in the string between the blocks is

- (A) $2F$
 (B) F
 (C) $\frac{2}{3}F$
 (D) $\frac{1}{2}F$
 (E) $\frac{1}{3}F$