



32. A 100-newton weight is suspended by two cords as shown in the figure above. The tension in the slanted cord is
- (A) 50 N
 - (B) 100 N
 - (C) 150 N
 - (D) 200 N
 - (E) 250 N

33. If a particle moves in such a way that its position x is described as a function of time t by $x = t^{\frac{3}{2}}$, then its kinetic energy is proportional to
- (A) t^2
 - (B) $t^{\frac{3}{2}}$
 - (C) t
 - (D) $t^{\frac{1}{2}}$
 - (E) t^0 (i.e., kinetic energy is constant)