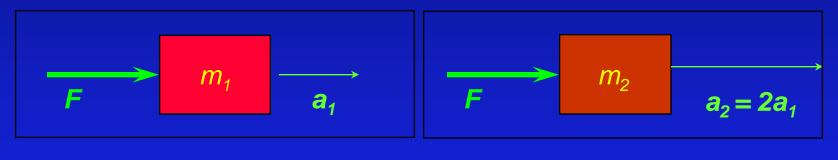




• A force **F** acting on a mass m_1 results in an acceleration a_1 . The same force acting on a different mass m_2 results in an acceleration $a_2 = 2a_1$. What is the mass m_2 ?



(A) $2m_1$ (B) m_1 (C) $1/2 m_1$

- F=ma
- $F = m_1 a_1 = m_2 a_2 = m_2 (2a_1)$
- Therefore, $m_2 = m_1/2$
- Or in words...twice the acceleration means half the mass

Physics 101: Lecture 4, Pg 11