Numericals

Practice. Learn. Succeed

Sub : Science **Grade: IX** **Date: .....**

Name: ..... **ID No.....**

Important Formulae

- Force, F = ma
- Momentum, p = mv
- Total momentum before collision = Total momentum after collision

$$m_1u_1 + m_2u_2 = m_1v_1 + m_2v_2$$

1. A force of 5 N produces an acceleration of 8 ms–2 on a mass m1 and an acceleration of 24 ms–2 on a mass m2. What acceleration would the same force provide if both the masses are tied together?

2. Two objects, each of mass 1.5 kg are moving in the same straight line but in opposite directions. The velocity of each object is 2.5 ms–1 before the collision during which they stick together. What will be the velocity of the combined object after the collision?

© Copyright 2011-12. Rights reserved with Producer/Publisher.