

**SANGAM SKM COLLEGE NADI**

**YEAR 12**

**PHYSICS**

**WORKSHEET 3**

**ANSWERS**

1.  $J = \Delta P = m\Delta v$   
 $= (0.05\text{kg})(75\text{ms}^{-1})$   
 $= 3.75\text{kgms}^{-1}$

2.  $m\Delta v = F \Delta t$   
 $(0.12\text{kg})(20\text{ms}^{-1}) = F(0.01\text{s})$   
 $F = 240\text{N}$

3.  $\Delta P = m\Delta v$   
 $= (0.06\text{kg})(46\text{ms}^{-1})$   
 $= 2.76\text{kgms}^{-1}$

b)  $\Delta P = F\Delta t$   
 $2.76 = F(0.02)$   
 $F = 1.38\text{N}$