

Worksheet: Laws of Motion

NIOS · Class 11 · Physics · 5 questions · 13 marks

Name: _____

Date: _____

Score: _____ / 13

Q1. Why is it harder to start a heavy box moving than to keep it moving? *[2 marks]*

Q2. A 5 kg block is pulled by a 20 N horizontal force against 8 N friction. Find the acceleration. *[2 marks]*

Q3. A 0.5 kg ball moving at 20 m/s is caught in 0.02 s. Find the average force. *[3 marks]*

Q4. A block slides down a 30 degree incline with $\mu_k = 0.2$. Find its acceleration ($g = 10 \text{ m/s}^2$). *[3 marks]*

Q5. A 1200 kg car turns a radius-20 m curve at 15 m/s. Find the friction force needed. *[3 marks]*
