

Answer on Question 54551, Physics, Mechanics | Kinematics | Dynamics |

Question:

What is the force, in Newtons, on a body of mass 3.0kg which is accelerating at $2.5\frac{\text{m}}{\text{s}^2}$?

Solution:

According to the Newton's 2-nd Law of Motion we get:

$$F = ma = 3.0\text{kg} \cdot 2.5\frac{\text{m}}{\text{s}^2} = 7.5\text{N}.$$

Answer:

$$F = 7.5\text{N}.$$