

(14)

## Kinematics

Chapter # 04

### Motion & Forces

4.1. Determine the acceleration of a car of mass 900 kg when a net force of 2700 N acts on it.

DATA:-

$$\text{Mass} = 900 \text{ kg}$$

$$\text{Force} = 2700 \text{ N}$$

$$\text{Acceleration} = ?$$

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SOLUTION:-

$$F = ma$$

$$a = \frac{F}{m}$$

$$a = \frac{2700}{900}$$

$$a = 3 \text{ ms}^{-2}$$