

## Chapter 5 Problem 26 †

### Given

$$F = 60.0 \text{ N}$$

$$m = 4.50 \text{ kg}$$

### Solution

Find the acceleration of the cart.

By Newton's 2nd law

$$F = ma$$

Solving for acceleration gives

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

Substituting in the provided values gives

$$a = \frac{60.0 \text{ N}}{4.50 \text{ kg}} = 13.3 \text{ m/s}^2$$

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†Problem from University Physics by Ling, Sanny and Moebs (OpenStax)