

2. This problem also requires application of Newton's Second Law.

$$F = m a$$

$$F = (300 \text{ kg}) (4 \text{ m / s}^2)$$

$$F = 1200 \text{ kg m / s}^2 = 1200 \text{ N}$$

since $1 \text{ N} = 1 \text{ kg m / s}^2$.