

Solution:

$$A1 - (c), a = F_{\text{net}} / m = (1.7 - 0.9) / 1.577 = 0.507 \text{ m/s}^2$$

$$A2 - (b), f_k = \mu_k N = 0.19 \times 0.737 \times 9.8 = 1.37$$

$$B1 - (a) a = 3.5 \text{ m/s}^2$$

$$(b) F = 10.5 \text{ N}$$

$$(c) F_{\text{fric}} = 5.88 \text{ N (Use } g = 9.8 \text{ m/s}^2)$$