

52. There is no acceleration, so the (upward) static friction forces (there are four of them, one for each thumb and one for each set of opposing fingers) equals the magnitude of the (downward) pull of gravity. Using Eq. 6-1, we have

$$4\mu_s N = mg = (79 \text{ kg}) (9.8 \text{ m/s}^2)$$

which, with $\mu_s = 0.70$, yields $N = 2.8 \times 10^2 \text{ N}$.