Problems

4.3 Newton's Second Law of Motion 21.

An object has a mass of $1\,\text{kg}$ on Earth. What is its weight on the moon?

    a. $1\,\text{N}$
    b. $1.67\,\text{N}$
    c. $9.8\,\text{N}$
    d. $10\,\text{N}$

22.

A bathroom scale shows your mass as 55 kg. What will it read on the moon?

    a. 9.4 kg
    b. 10.5 kg
    c. 55.0 kg
    d. 91.9 kg

4.4 Newton's Third Law of Motion 23.

A person pushes an object of mass 5.0 kg along the floor by applying a force. If the object experiences a friction force of 10 N and accelerates at 18 m/s^2, what is the magnitude of the force exerted by the person?

    a. -90 N
    b. -80 N
    c. 90 N
    d. 100 N