1. David and Karen push against a wall. David pushes with a force of 450 N for 60. s. Karen pushes with a force of 350 N for 120 s. How much work do they each do?

2. How much work is required to lift a 4.0 kg mass up a distance of 2.0 m?

3. A 80. kg box is pushed 4.0 m across a horizontal surface by a 45 N applied force.
    a) How much work was done?
    b) If the box started from rest, what is final speed of the box?

4. A spring-driven gun propels a 10.0 g dart . The spring is compressed by 5.0 cm by exerting an average force of 20. N.
    a) What is the work done in compressing the spring?
    b) How much potential energy is stored in the spring?
    c) With what speed will the dart leave the gun, assuming the spring has negligible mass?

5. A 1200 kg car is moving at 50.0 km/h. The driver applies the brakes and the car stops after 16 m.
    a) How much work is done by friction on the car?
    b) What is the force of friction on the car?

6. The graph shows the net force on a 250 kg cart as it is pushed across a frictionless surface.
    a) What is the work done on the cart?
    b) If the car started from rest, what is the final speed of the cart?