Work Examples / Non-Examples

Work Practice

Work Practice

Work

Work Equation

Work Calculations

Work Practice

Work Equation:



Work Equation Unit:

What is the force required to lift an object?



A student exerts a force of 4 N to move her desk forward 0.75 m. How much work is done?

Work Definition:

Jimmy picks up a box with a mass of 12 kg. If he lifts the box to a height of 0.7 m, how much work has he done lifting?

First find the force needed to pick up the box:

Find the work done:

A rock climber wears a 7.5 kg backpack while scaling a cliff. After 30.0 min, the climber is 8.2 m above the starting point.

How much work does the climber do on the backpack?

Work Non-Examples:

A 5 kg backpack is lifted 2.0 m. How much work is done?

If the climber weighs 645N, how much work is done to lift the climber and the backpack?

Work Examples:



A wagon is pulled a distance of 75 meters across the grass. The wagon is pulled with a constant force of 25 N. How much work is done?



Together two students exert a force of 825N in pushing a car a distance of 35m. How much work do the students do on the car?

If their force is doubled, how much work must the do on the car to push it the same distance?