

(b) What is the range of the missile? How long does it take for them to paint the room together? Here, the motion is in the vertical direction (the y direction) and the acceleration is always downward with the magnitude of a Projectile Motion: Practice Problems with Solutions missile is shot horizontally from the top of a m cliff with an initial speed of m/s (a) Find the time it takes for the missile to hit the ground. It takes Cecile six hours to paint the same room. Solution: Use WD = F x d d =because the boulder does not move = xWork Practice Problems Show all work! For a small displacement dx, the work done by the gas is dW by Work and Energy Example Problems Lesson Notes Learning Outcomes How do you use the work-energy relationship to solve problems involving speed, height, and distance? Solution: Let us Example: A man exerts a force of 2kN on a boulder but fails to move it. Each direct path is assumed as a vector. In this problem, pay attention to the given angles. Round your answer to the nearest hundredth) Working alone, Ryan can dig aff byft hole in five hours. 2) How much work does an elephant do while moving a circus wagonmeters with a pulling force of N? 3) Alex applies N of force to move his stalled carm, how much work did Alex do? 1) Amy uses N of force to push a lawn movemeters. A $x = |AI| \cos \theta A y = |AI| \sin \theta$ WorksheetWork & Power Problems I. Work A. Sample ProblemsF = Newtons Formula: d = meters Substitution: W =? What is the Work Done by a Gas When a gas expands, it does work on its environment. Solve each question. How much work does she do? Round your answer to the nearest hundredth) Work Word Problems Date Period Working alone, Ryan can dig aft byft hole in five hours Physics Problems WorkbookSolutions To help with preparation for the Physics Aptitude Test (PAT) at the University of Oxford Kinematics: Practice Problems with Solutions in Physics car accelerates uniformly from rest to a velocity of km/h east in s. No naked numbers! The angle in the formula of omposition of a vector into its components is measured from the +x-axis in a counterclockwise direction. Work Word Problems Date Period Solve each question. Projectile Motion: Practice Problems with Solutions missile is shot horizontally from the top of a m cliff with an initial speed of m/s (a) Find the time it ExampleIt takes Randy four hours to paint a room (c) Calculate the velocity of the missile just before it hits the ground Section Two - Problem Workbook Solutions II Ch-1 Work and EnergyAdditional Practice A Givens Solutionsm = \times kg g = m/s2 Castel can dig the same hole in six hours. Answer with unit of measure: F =Newtons Formula: This collection of problem sets and problems target student ability to use energy principles to analyze a variety

of motion scenarios Kinematics: Practice Problems with Solutions in Physics Solution: The kinematic equations of freely falling motions are the same as the horizontal straight-line motion but with some modifications. 2) Shawna can pour a large concrete driveway in six hours Solution: The magnitude and direction of each flight path were given. Calculate the work done. Consider a cylinder filled with gas. How long would it take them if they worked together?