



PHYSLETS ANSWER SHEET

ES2A6

Energy / Set 2 / Animation 6

Name _____ Class _____

<Show all work on calculations. Include proper units. Explanations require complete sentences.>

- 1) Calculate the force exerted by the truck to pull the box up the hill. _____ N

- 2) Calculate the work done on the box to bring it up the hill as shown. _____ J

- 3) Calculate the power expended to move the box up the hill. _____ W

- 4) If the rope were to break at the final position shown, how much higher up (vertically) would the box slide before coming to rest?
_____ m

- 5) Which of the following is true (while the box is being pulled up the hill):
A) The box exerts more force on the truck than the truck exerts back on the box.
B) The truck exerts more force on the box than the box exerts back on the truck.
C) The truck and the box exert equal amounts of force on each other.
