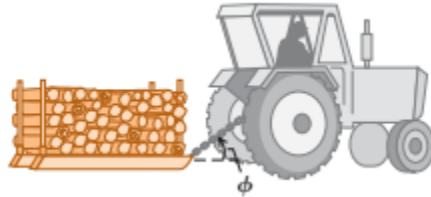


Exercise: Chapter 6

Answer ALL questions. (15 Marks)

- (a) Izwan knobbed his tractor to a sledge which is full with wood and pulls it a distance of 20 m along the ground. The total weight of sledge together with its load is 14,700 N. The tractor exerts a 5000 N force at an angle above the ground. If the frictional force is 3500 N:
- N:
- (i) Determine the work done by each force acting on the sledge.
 - (ii) Calculate the total work done by all the forces.
 - (iii) If the sled's initial speed is 2.0 m/s, what is the speed of the sled after it moves 20 m?



(15 Marks)

Answer:

1. (i) -70000Nm or -70 kJ, (ii) 10 kJ, (iii) 4.2 m/s