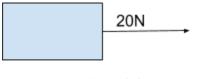
1. Alfonso pushes a box on a well waxed (frictionless) floor to the right with a 20 N force causing it to accelerate at 1.5 m/s/s. What is the mass of the box?

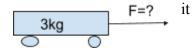


a=1.5m/s/s

2. The Jamaican bobsled team applies a force of 500 N to their 75 kg sled experiencing 5N of friction. What is the acceleration of the sled (assume the ice is frictionless)?

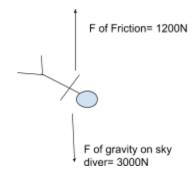


3. A 3.00 kg cart on a frictionless track is pulled by a string so that accelerates at 2.00 m/s/s. Calculate the tension in the string?



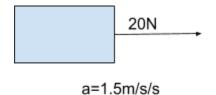
4. A 70.0 kg skydiver falls towards the earth. If the force due to air resistance is 0 N, what is the acceleration of the skydiver?

5. The 70kg skydiver in problem 5 opens her chute. The force due to air resistance is now 1200 N. What is the acceleration of the skydiver?



- 6. Calculate the force applied on an object accelerating 60m/s² if its mass is 35kg.
- 7. What is the mass of an object that takes 120N of force to move with an acceleration of 50m/s²?
- 8. What is the weight of a 11.5kg person jumping off a diving board?

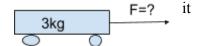
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