

Name:	Block:
IPC – Schenck	Date:

Force Practice Problems

Show work for the following problems on the back of this sheet!

	Force	Mass	Acceleration	Answer
1.	?	65 kg	25 m/s ²	
2.	?	1.2 kg	16 m/s ²	
3.	?	.025 kg	100 m/s ²	
4.	50 N	?	5 m/s ²	
5.	100 N	45 kg	?	

Show all work for the following problems. No credit will be given if you do not show all steps!

6. A car has to come to a quick stop at a red light. In doing so it accelerates at a constant rate of -50 m/s^2 . If the car has a mass of 2200 kg, what is the force needed to stop the car?

7. An apple falls from a tree. If the apple has a mass of .25 kg, what is the force needed to make the apple fall? (Remember, the acceleration due to gravity is -9.8 m/s^2)

8. If it takes 23N of force to push your book off of the table, what is the acceleration of the book if it has a mass of 1.5 kg?

9. If a dog is accelerating at a constant rate of 6.57 m/s^2 , what is the mass of the dog if 25 N of force is being applied to it?

10. If a 20 kg child started a race and accelerated to a speed of 12 m/s in 6 seconds, what is the force caused by the child running? (Hint: This questions has two parts!)