Fo	rce, Mass and Acceleration Practice Na	ne:	
Co Fo – a	omplete the following problems for extra practice before the test. llow the 3-step process to earn full credit. Fold the paper along the b unswers are to the right to check your work.		Formula $A = \frac{F}{m}$
1.	Your bicycle has a mass of 9.1 kilograms. You accelerate at a rate m/s^2 . Calculate the net force that is accelerating the bicycle.	of 1.79	1. F = 16.29 N
2.	The Space Shuttle has a liftoff mass of 2,041,000 kg and accelerate of 16 m/s ² . Calculate the force (thrust) that is accelerating the Space	s at a rate e Shuttle.	2. 3,265,600 N
3.	A runner has a mass of 89 kilograms. He produces a force of 84 Ne between the ground and his running shoes. How fast does he accele	ewtons erate?	3. 0.94 m/s ²
4.	A rocket accelerates at 56 m/s^2 with the force (thrust) of 44,800 N. What is the mass of the rocket?		4. 800 kg
5.	Calculate the acceleration of a car if the force on the car is 450 New the mass is 1300 kilograms.	tons and	5. 0.35 m/s ²
<mark>6.</mark>	Convert 12.3 Newtons to pounds. 1 lb	<u>= 4.48 N</u>	6. 2.75 lbs
<mark>7.</mark>	If you weigh 97.7 kg, how many pounds would you weigh? 1 kg	g = 2.2 lbs	7. 214.9 lbs