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1. How much net force is needed to accelerate a 15 kg mass at $2.8 \mathrm{~m} / \mathrm{s}^{2}$ ?
2. Delon's car is dead. He is pushing it to the east out of the parking lot with a force of 250 N . carter, being a good friend, comes to help and also pushes east with a force of 75 N . If Delon's car has a mass of 750 kg , what is the car's acceleration?
3. Hunter is pulling on his little red wagon to the west with a force of 125 N . Luke doesn't want him to take the wagon so he is pulling in the opposite direction with a force of 75 N . If the wagon has a mass of 15 kg , what is the wagon's acceleration?
4. A planes engine is pushing it north with a force of 1250 N . The wind is blowing to the east with a force of 125 N . If the plane is a 775 kg mass, what is the magnitude of its acceleration?
5. A 50.0 kg box is being pulled by two teams of people. Team Bonzo is pulling on the box with a force of 324 N @ $40.0^{\circ} \mathrm{N}$ of E . Team Kong is pulling on the box with a force of 856 N @ $20.0^{\circ} \mathrm{W}$ of $N$. What is the resultant acceleration of the box? (There are NINE calculations needed to get to the proper answer!)
