

## Net Force and Acceleration: Shopping-Cart Challenge

A son pulls on a shopping cart by dragging his feet. But his father pulls much harder, and the cart moves to the left.



Courtesy of Hector Mireles

### Instructions

1. Represent the cart with a single dot.
2. Using **black** vectors (arrows), draw all of the forces acting on the cart.
3. What is the direction of the net force? (Use a **bold black** vector.)
4. What is the direction of the acceleration? (Use a **red** vector.)