

## Momentum

1. What velocity must a car with a mass of 1210 kg have in order to have the same momentum as the pickup truck in Sample Problem 6A?
2. An ostrich with a mass of 146 kg is running to the right with a velocity of 17 m/s. Find the momentum of the ostrich.
3. A 21 kg child is riding a 5.9 kg bike with a velocity of 4.5 m/s to the northwest.
  - a. What is the total momentum of the child and the bike together?
  - b. What is the momentum of the child?
  - c. What is the momentum of the bike?