

- 10) A force of 20. newtons is exerted on a cart for 10. seconds. How long must a 50.-newton force act to produce the same impulse?
- A) 2.0 s B) 4.0 s C) 10. s D) 5.0 s
- 11) Which quantity has *both* a magnitude and a direction?
- A) work B) energy C) power D) impulse
- 12) An air bag is used to safely decrease the momentum of a driver in a car accident. The air bag reduces the magnitude of the force acting on the driver by
- A) increasing the length of time the force acts on the driver
B) decreasing the mass of the driver
C) increasing the rate of acceleration of the driver
D) decreasing the distance over which the force acts on the driver