Calculating Acceleration

1. A motorcycle accelerates from rest to 15 m/s [E] in 2.5 s. What is the motorcycle's acceleration?

2. A car traveling forward at 22 m/s stops in a time of 2.0 s. What is the car's acceleration?

3. A bicycle speeds up from 3.0 m/s [N] to 12 m/s [N] in 4.0 s. What is the bicycle's acceleration?

4. A train traveling West at 18 m/s slows to a velocity of 6.0 m/s West in a time of 24 s. What is the train's acceleration?

5. A sprinter, starting from rest, accelerates at 2.0 m/s² forward. What is the sprinter's velocity after 1.5 s?

