$v_f = \bar{a}t + v_i$

Introduction to Constant Acceleration Notes

1. What is acceleration?

2. What is the difference between a 'fast' car and a 'quick' car?

3. Can acceleration be negative? If so, how?

4. Can negative acceleration cause an object to speed up if it is already traveling at a negative velocity? If so, how?

5. Can a positive acceleration slow an object down if its initial velocity is negative? If so, how?

6. A car begins traveling at 9 m/s and accelerates to 59 m/s in 10 seconds. What was its acceleration in m/s/s?

7. A car begins traveling at -8 m/s and accelerates at -2 m/s/s for 10 seconds. What is its final velocity in m/s?

8. A car can maximally accelerate during breaking at -8 m/s/s. What is the minimum time in seconds for the car to go from 90 m/s to 10 m/s?

9. A car begins traveling at 15 m/s and accelerates at -5 m/s/s for 10 seconds. What is its final velocity in m/s?