

Acceleration Practice

An automobile accelerates 2.1 m/s^2 over 4.50 s to reach freeway speed at the end of an entrance ramp. If the car's final speed is 90.0 km/h , what was its initial speed when it began accelerating? Express your answer in km/h . (55.98 km/h)

An automobile accelerates 2.1 m/s^2 over 4.50 s to reach freeway speed at the end of an entrance ramp. If the car's final speed is 90.0 km/h , what was its initial speed when it began accelerating? Express your answer in m/s . (15.55 m/s)

A rock is dropped from the top of a tower and accelerates at a rate of 9.8 m/s^2 over a 0.075 minute time frame. What is the rock's final speed? (44.1 m/s)

A rock is thrown from the top of a tower and accelerates at a rate of 9.8 m/s^2 over a 0.075 minute time frame. What was the rock's initial speed if the final speed is 180 km/h ? (5.9 m/s)