

Worksheet: Acceleration Problems

(Frameworks Code)

Solve the following problems. Use correct problem set-up. Label all numbers with the correct units:

1. An automobile accelerates from 10 ft/s to 80 ft/s in 7 seconds. Find the acceleration.
2. A dragster accelerates from rest to 240 km/hr in 6 seconds. Find its acceleration.
3. An airplane accelerates from rest to 120 mi/hr at a rate of 6 mi/hr/s. Find the time to reach this velocity.
4. An object starting from rest reaches a velocity of 20 m/s in 10 seconds. Find the acceleration.
5. An object accelerates from 20 km/hr to 60 km/hr in 10 seconds. Find the acceleration.
6. An object accelerates from 22 ft/s to 88 ft/s in 20 seconds. Find the acceleration.
7. A body starting at rest accelerates at a rate of 5 m/s/s and reaches a final velocity of 25 m/s. Find the time to reach this velocity.
8. An object is dropped from a building and falls for 10 seconds. If the acceleration of the object is 9.8 m/s^2 (m/s/s), find the final velocity.