

## Speed/Velocity/Acceleration

### 3 Level Practice

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$$\text{Speed} = \frac{\text{Distance}}{\text{Time}}$$

$$\text{Acceleration} = \frac{\text{Final Velocity} - \text{Initial Velocity}}{\text{Time}}$$

#### **YOU MUST SHOW YOUR WORK**

*You can use a calculator but you must show the steps involved in doing the problem.*

1. What is the speed of a car that travels 150 km in 3 hours?
2. A vehicle travels 2345 meters in 315 seconds towards the setting sun. What is its velocity?
3. What is the speed of a bus that travels 250 km in 2 hours?
4. What distance will a car traveling at 65 km/h travel in 3 hours?
5. What distance will be traveled if you are going 120 km/h for 30 minutes?
6. How long will it take to go 150 km traveling at 50 km/h?
7. How long will it take to travel 200 km traveling at 10 m/s? [Answer must be in hours]
8. If a rocket travels 5600 km in 3 hours, what is its speed?
9. What is the acceleration of a car that goes from 40 to 80 km/h in 2 seconds?
10. A vehicle that goes from 5 to 45 m/s in 8 seconds. What is its acceleration?