

Motion

I. Match the terms in Column A with its description in Column B. Type the letter of your answer in the box.

Column A	Column B
_____ 1. It refers to the quantity that only has size and units, but no direction.	a. motion
_____ 2. It is the total movement of an object without direction.	b. distance
_____ 3. It is the change in velocity.	c. displacement
_____ 4. It is the quantity with size, units, and direction.	d. scalar
_____ 5. It is a measure of how fast or slow an object moves.	e. vector
_____ 6. It is the change of position of an object.	f. speed
_____ 7. It measures how fast or slow an object moves with direction.	g. velocity
	h. acceleration

II. Choose **true** or **false**.

- _____ 1. When you are riding a swing, it means the swing is at rest.
- _____ 2. 52 km north is a vector quantity.

3. It is also considered acceleration when a moving car suddenly stops.

III. Read and solve the problems.

1. The train traveled from the station to the mall, a distance of 576 km in 6 hours. The train is only allowed to travel at a maximum speed of 90 km/h. Did the train break the speed limit?
2. A swimmer speeds up from 1.1 m/s to 3.2 m/s during the last 13 seconds of the race. What is the acceleration of the swimmer?
3. A roller coaster is moving at 25 m/s at the bottom of the hill. Three seconds later it reaches the top of the hill at 10 m/s. What was the acceleration of the roller coaster?