

## Question 2

Which of the following is a vector: a person's height, the altitude on Mt. Everest, the velocity of a fly, the age of Earth, the boiling point of water, the cost of a book, Earth's population, or the acceleration of gravity?

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### Solution

The velocity of a fly is a vector because it consists of a magnitude (speed) and a direction (where it's moving to). The acceleration of gravity is also a vector because it consists of a magnitude ( $9.81 \text{ m/s}^2$  in SI units) and a direction (towards the center of the planet).