

- 5** Radio waves can be used to measure the distance between Earth and the planet Jupiter.

A pulse of radio waves is emitted from the surface of Earth. The pulse reflects from the surface of Jupiter and is detected again on Earth.

The time between emitting and receiving the pulse is 3960 s.

What is the distance between Earth and Jupiter?

- A**  $5.94 \times 10^8 \text{ km}$
- B**  $1.19 \times 10^9 \text{ km}$
- C**  $5.94 \times 10^{11} \text{ km}$
- D**  $1.19 \times 10^{12} \text{ km}$