

- 40** A galaxy is at a distance of 60 million light-years from the Earth. The galaxy is moving away at a speed of 1300 km/s.

One light-year is about  $9.5 \times 10^{12}$  km.

There are about  $3.2 \times 10^7$  seconds in one year.

Which expression can be used to estimate the age of the Universe in years?

**A** 
$$\frac{60 \times 10^6 \times 3.2 \times 10^7}{1300 \times 9.5 \times 10^{12}}$$

**B** 
$$\frac{60 \times 10^6 \times 9.5 \times 10^{12}}{1300 \times 3.2 \times 10^7}$$

**C** 
$$\frac{1300 \times 9.5 \times 10^{12}}{60 \times 10^6 \times 3.2 \times 10^7}$$

**D** 
$$\frac{1300 \times 3.2 \times 10^7}{60 \times 10^6 \times 9.5 \times 10^{12}}$$