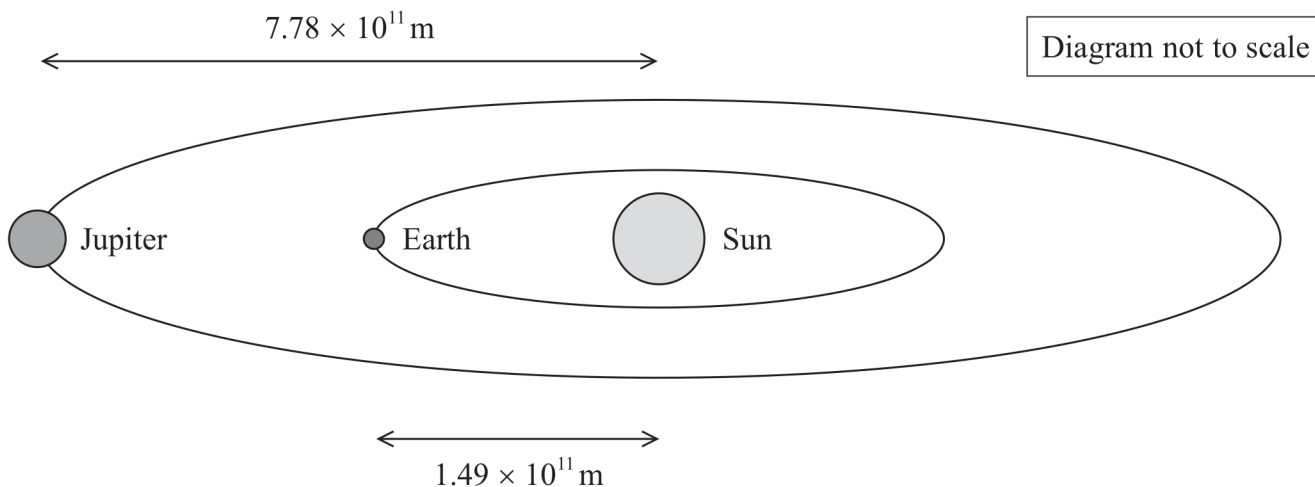**9** Earth and Jupiter orbit the Sun, as shown.

The distance from Earth to the Sun is 1.49×10^{11} m.
The distance from Jupiter to the Sun is 7.78×10^{11} m.

The intensity of sunlight at Jupiter is I_J.

Which of the following can be used to calculate the intensity of the sunlight at Earth?

☒ **A** $I_J \times \dfrac{(7.78 \times 10^{11})^2}{(1.49 \times 10^{11})^2}$

☒ **B** $I_J \times 4\pi \times \dfrac{(7.78 \times 10^{11})^2}{(1.49 \times 10^{11})^2}$

☒ **C** $I_J \times \dfrac{7.78 \times 10^{11}}{1.49 \times 10^{11}}$

☒ **D** $I_J \times 4\pi \times \dfrac{7.78 \times 10^{11}}{1.49 \times 10^{11}}$

(Total for Question 9 = 1 mark)