

Highlighted Chain-of-Thought (HoT) AI Agent

Ask a question and receive answers with transparent, PhD-level reasoning

Your Question

If Earth is 149.6 million km from the Sun and light travels at 299,792 km/s, how long does it take for sunlight to reach Earth?

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Tagged Question

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Answer

First, we need to convert the distance from the Sun to Earth from kilometers to seconds. We know that `<fact1>`Earth is 149.6 million km from the Sun`</fact1>` and `<fact2>`light travels at 299,792 km/s`</fact2>`. So, we divide the distance by the speed of light: $149.6 \text{ million km} / 299,792 \text{ km/s} = 499.004$ seconds. Therefore, it takes approximately 499 seconds for sunlight to reach Earth.

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