

Answer on Question #46308, Physics, Astronomy — Astrophysics

if the distance to earth at the time was 9×10^7 km and radio waves travel with a speed of 3×10^8 m/s, how long did it take for the signal to reach listeners on Earth?

Solution

It took him

$$t = \frac{s}{v} = \frac{9 \cdot 10^{10} m}{3 \cdot 10^8 m/s} = 3 \cdot 10^2 s = 5min$$