**Answer on Question #62011-Physics-Astronomy-Astrophysics**

The "Opportunity" rover that just landed on Mars transmitted music back to Earth. If the distance to Earth at the time was 9x10^7 km and radio waves (a kind of "light") travel with a speed of 3x10^8 m/s, how long did it take for the signal to reach listeners on Earth?

**Solution**

$$t = \frac{d}{v} = \frac{9 \cdot 10^{10} m}{3 \cdot 10^8 \frac{m}{s}} = 300 \, s = 5 \, min.$$

**Answer: $5 \, min$.**