1. On average, the Earth is one hundred and fifty million km from the Sun.
   (a) Write this quantity out in ordinary notation. (don’t forget units!)
   (b) Write it in scientific notation. (don’t forget units!)

   (a) $10^8 \times 10^{-5} = ?$
   (b) $10^{-12} / 10^{-3} = ?$

3. On your last birthday, how many seconds old were you? Express your answer both in:
   (a) scientific notation
   (b) words (that is, so-many "thousand", "million", "billion", or "trillion", etc.)

4. The relationship between distance, speed, and time is: dist = speed x time. Solve this equation
   for time. (That is, get time by itself on the left side.)

5. We use radio wavelengths of light, which travel at the speed of light, to communicate with
   spacecraft such as the rover on Mars. Let's say we send a signal to the rover when Mars is 350
   million km away.
   (a) What is the speed of the signal we send in m/s?
   (b) What is the speed of the signal we send in km/s?
   (c) How many seconds does it take for the signal to reach the rover? How many minutes?