1. The number 1,000,000,000 can be written in exponential notation as \(10^9\).

2. \(10^{-7}\) is one way of writing the number \(\frac{1}{10,000,000}\).

3. Which of the following statements about the celestial sphere is true?
   (A) Everything in the Universe lies on the surface of the celestial sphere.
   (B) A STAR CAN BE FOUND BY KNOWING ITS RIGHT ASCENSION AND DECLINATION.
   (C) The North Celestial Pole can be seen from anywhere on Earth.
   (D) Polaris lies on the celestial equator.

4. The Moon and the Sun both happen to have an angular size of about 0.5° in our sky. (We say that they both have an \textit{angular size} of about 0.5°.) Answer true or false for the following questions:

   Since the Sun is further away than the Moon, it must be bigger than the Moon.
   (A) \textbf{TRUE}            \hspace{1cm} (B) \textbf{FALSE}

   The Moon and the Sun must have the same physical diameter.
   (C) True            \hspace{1cm} (D) \textbf{FALSE}

   If the Moon and the Sun changed places, they would still have the same angular size as they do now.
   (E) True            \hspace{1cm} (F) \textbf{FALSE}

5. Which of the following is closest to a typical distance between stars in our galaxy?
   (A) 100 AU
   (B) 100 kilometers
   (C) 1 PARSEC
   (D) 1 megaparsec

6. Light from the Moon reaches us in about
   (A) 400 years
   (B) 8 minutes
   (C) 1 SECOND
   (D) a billionth of a second