**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**M8-U6: Notes #5 – Scientific Notations Operations: Multiplication & Division**

**Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Perform the following operations; leave your answer in scientific notation.**

**Example 1:**  **Example 2:** 

**Try-It!**

**a)**  **b)** 

**Example 3:**  **Example 4:** 

**Try-It!**

**a)**  **b)** 

**Example 5:**  **Try-It:** 

**Example 6:** In 2010, the population in the United States will be about . Spending for health care will be about $8754 per person. About how much will the US spend on health care in 2010?

**Try-It:**  The average American household spends about $41,356 each year. If there are about households, what is the approximate amount of money spent by American households in one year?

**Perform the following operations; leave your answer in scientific notation.**

**Example 7:**  **Try-It!:** 

**Example 8:**  **Try-It!:** 

**Example 9:**  **Try-It!:** 

**Example 10:**  **Try-It!:** 

**Example 11:**  **Try-It!:** 

**Example 12:** There are about 9 billion devices () connected to the Internet. If a wireless router can support 300 devices, how many wireless routers are necessary to connect all 9 billion devices wirelessly?

**Practice: Perform the following operations; leave your answer in scientific notation.**

**1)**  **2)** 

**3)**  **4)** 

**5)**  **6)** 

**7)**  **8)** 

**9)** The distance light travels in one year (one light year) is about  miles. The closest star to Earth (other than the Sun) is Alpha Centauri, which is 4.35 light years from Earth. About how many miles from Earth is Alpha Centauri?

**10)** A conservative estimate of the number of stars in the universe is . The average human can see about 3,000 stars at night with his naked eye. About how many times more stars are there in the universe, compared to the stars a human can actually see?