**Lesson 1.7 Homework Practice**

***Add and Subtract Numbers in Scientific Notation***

**Evaluate each expression. Express the result in scientific notation.**

 **1.** ( $2.82×10^{9}$) + ( $6.3×10^{7}$) **2.** ( $3.64×10^{6}$) – ( $2.18×10^{4}$)

 **3.** ( $9.8×10^{-5}$) – ($6.7×10^{-3 }$) **4.** ($6.98×10^{-5}$) + ($1.65×10^{-7}$)

 **5. MARS** The diameter of Mars is about 6.8 × $10^{3}$ kilometers. The diameter of Earth is about 1.2763 ×$10^{4}$ kilometers. About how much greater is Earth’s diameter than the diameter of Mars?

 **6.** Angora wool, obtained from rabbits, has fibers with a diameter of about 1.0 ×$10^{-6}$ meters in diameter. Cashmere, obtained from goats, has fibers with a diameter of about 1.45 ×$10^{-5}$ meter.

1. What is the sum of the diameters?-Show all work
2. How much wider is the cashmere fiber than the angora fiber? Show all work



Use the information below to answer all parts for question 7

A piece of land has an area represented by the expression . The length is represented by .

|  |  |
| --- | --- |
| a.) What is the width of the land? ***Show all work and write your answer using EXPONENTS!!!*** | b.) What are the actual dimensions of the piece of land? ***Show all work******Length\_\_\_\_\_\_\_\_*** ***Width\_\_\_\_\_\_\_\_*** ***Area\_\_\_\_\_\_\_\_*** |