> **Scientific Notation Word Problems**

Example 1: In 2006, Blue Ridge Parkway was visited by about 1.9×10^7 people. That same year, Great Smoky Mountains National Park was visited by about 9.3×10^6 people. How many more people visited Blue Ridge Parkway than Great Smoky Mountains National Park in 2006? **What operation will be used to solve this problem?**

Example 2: In 2006, the US had a Gross Domestic Product (GDP) of 1.313×10^{13}. The United Kingdom had a GDP of 1.93×10^{12}. What were the combined GDPs of the US and the UK in 2006? **What operation will be used to solve this problem?**

Example 3: One cell has a diameter of 4.5×10^{-6}. If there are 20 cells growing in a lab, what are their combined diameters? **What operation will be used to solve this problem?**

Example 4: The average distance from Earth to the Sun is 1.46×10^8 kilometers. The average distance from Earth to the Moon is 3.84×10^5 kilometers. About many more times as great is the distance from Earth to the Sun than to the Moon? **What operation will be used to solve this problem?**

Example 5: About 8.73×10^8 people in the world speak Chinese. About 3.22×10^8 speak Spanish. In scientific notation, how many more people speak Chinese than Spanish? **What operation will be used to solve this problem?**

Example 6: Great Lake Superior covers an area of 3.17×10^4 square miles. The smallest Great Lake, Ontario, covers an area of 7.34×10^3 square miles. About how many times as great is the area covered by Lake Superior than Lake Ontario? **What operation will be used to solve this problem?**

Example 7: The following incomes are recorded for music artists in 2010.

Artist	2010 Income
Jay-Z	2.56×10^7
Yo Gotti	5.1×10^6

How much more money did Jay-Z make over Yo Gotti? **What operation will be used to solve this problem?**

Example 8: The distance between Memphis and Sand Francisco is 1.2×10^3 miles. The distance between Memphis and Nashville is 2.5×10^2. How much further is San Francisco than Nashville from Memphis? **What operation will be used to solve this problem?**

Example 9: The largest planet in our solar system is Jupiter with a diameter of about 1.43×10^5

kilometers. The smallest planet in our solar system is Mercury with a diameter of about 4.9×10^3 kilometers. About how many times greater is the diameter of Jupiter than the diameter of Mercury? **What operation will be used to solve this problem?**

Example 10: In 2006, China had 1.311×10^8 internet users. That same year, Japan had 9.09×10^7 internet users. How many internet users did the two countries have combined? **What operation will be used to solve this problem?**

Example 11: With nearly 3.0×10^8 books, the Library of Congress is the largest library in the US. The University of Tennessee has about 2.97×10^7 books in its library. How many more books does the Library of Congress have than the University of Tennessee? **What operation will be used to solve this problem?**