

**HW 6-2 - Add & Subtract with Sci. Notation**

Write the number in scientific notation.

1. 0.00002031

$2.031 \times 10^{-5}$

2. 43,680,000,000

3. 0.02009

$2.009 \times 10^{-2}$

4. 608,000,000

5. 0.1300000

$1.3 \times 10^{-1}$

6. 500,300,000,000

Evaluate each expression. Express the result in scientific notation.

7.  $(9.5 \times 10^{11}) + (6.3 \times 10^9)$

$9.563 \times 10^{11}$

11.  $(7.3 \times 10^5) + 2,400,000$

$3.13 \times 10^6$

8.  $(1.03 \times 10^9) - (4.7 \times 10^7)$

12.  $(8.64 \times 10^6) + (1.334 \times 10^{10})$

9.  $(1.357 \times 10^9) + 590,000$

$1.35759 \times 10^9$

13.  $(1.21 \times 10^5) - 9,500$

$1.115 \times 10^5$

10.  $87,000 - (6.34 \times 10^1)$

14.  $(7 \times 10^{-15}) - (4 \times 10^{-17})$

Evaluate each expression. Express the result in scientific notation.

15.  $(7.2 \times 10^{-18}) + (1.82 \times 10^{-17})$

16.  $(9 \times 10^{-21}) + (3.15 \times 10^{-22})$

$$2.54 \times 10^{-17}$$

17. The population of Washington is  $6.9 \times 10^6$  people, Oregon is  $3.9 \times 10^6$  people, and Idaho is  $1.6 \times 10^6$  people. These three states make up the Pacific Northwest. What is the total population of the Pacific Northwest?

$$1.24 \times 10^7$$

18. The mass of Jupiter is  $1.9 \times 10^{27}$  kilograms, the mass of Earth is  $5.97 \times 10^{24}$  kilograms, and the mass of Venus is  $4.87 \times 10^{24}$  kilograms. What is the total mass of these three planets?