

Scientific Notation Guide & Notes

As the
coefficient
gets
smaller



31,000,000
 $3,100,000 \times 10^1$
 $310,000 \times 10^2$
 $31,000 \times 10^3$
 $3,100 \times 10^4$
 310×10^5
 31×10^6
 3.1×10^7
 $.31 \times 10^8$
 $.031 \times 10^9$
 $.0031 \times 10^{10}$

The
exponent
gets larger



As the
coefficient
gets larger



The
exponent
gets smaller



1. $4.6 \times 10^9 + 5.1 \times 10^7$

2. $6.5 \times 10^{13} - 2.2 \times 10^{11}$

#1 answer: _____

#2 answer: _____

3. $(7.3 \times 10^8) (3.1 \times 10^5)$

4.
$$\frac{3.72 \times 10^{97}}{1.24 \times 10^{82}}$$

#3 answer: _____

#4 answer: _____

More Scientific Notation Practice

Name: _____

For 1–6, add or subtract each and write your answer in scientific notation.

1. $3.1 \times 10^7 + 2.4 \times 10^5$

2. $7.2 \times 10^{11} - 1.1 \times 10^9$

#1 answer: _____

#2 answer: _____

3. $6.5 \times 10^8 + 3.3 \times 10^5$

4. $9.9 \times 10^{11} - 2 \times 10^{110}$

#3 answer: _____

#4 answer: _____

5. $6.5 \times 10^{80} + 3.3 \times 10^{83}$

6. $2 \times 10^{111} - 9.9 \times 10^{110}$

#5 answer: _____

#6 answer: _____

For 7–12, multiply or divide each and write your answer in scientific notation.

7. $(6.5 \times 10^8)(3.3 \times 10^5)$

8. $(1.5 \times 10^{15})(1.5 \times 10^5)$

#7 answer: _____

#8 answer: _____

9. $\frac{8.4 \times 10^{87}}{2.1 \times 10^{80}}$

10. $\frac{4.24 \times 10^{91}}{2.12 \times 10^{80}}$

#9 answer: _____

#10 answer: _____

11. $(9.2 \times 10^{24})(1.1 \times 10^{21})$

12. $\frac{2.24 \times 10^{19}}{4 \times 10^{12}}$

#11 answer: _____

#12 answer: _____