

Name

Key

Period

Date

Operations with Scientific Notation

These should all be solved without using a calculator. Make sure your answers are in proper scientific notation.

1. $(2.5 \times 10^6)(3 \times 10^3) = 7.5 \times 10^9$

2. $(3 \times 10^{-5})(3 \times 10^{-10}) = 9 \times 10^{-15}$

3. $(4 \times 10^1)(2 \times 10^{11}) = 8 \times 10^{12}$

4. $(6 \times 10^5)(4 \times 10^3) = 24 \times 10^8$
 $= 2.4 \times 10^9$

5. $(5 \times 10^{-15})(7 \times 10^6) = 35 \times 10^{-9}$
 $= 3.5 \times 10^{-8}$

6. $(2 \times 10^{-4})(7 \times 10^{-8}) = 14 \times 10^{-12}$
 $= 1.4 \times 10^{-11}$

7. $(7 \times 10^6)(3 \times 10^{-7}) = 21 \times 10^{-1}$
 $= 2.1 \times 10^0$

8. $(4 \times 10^{-10})(3 \times 10^{13}) = 12 \times 10^3$
 $= 1.2 \times 10^4$

9. $\frac{2.6 \times 10^{-3}}{1.3 \times 10^9} = 2 \times 10^{-12}$

10. $\frac{5 \times 10^8}{2 \times 10^3} = 2.5 \times 10^5$

11. $\frac{1.2 \times 10^7}{4 \times 10^5} = 0.3 \times 10^2$
 $= 3 \times 10^1$

12. $\frac{2.3 \times 10^{-3}}{4.6 \times 10^9} = 0.5 \times 10^{-12}$
 $= 5 \times 10^{-13}$

13. $\frac{7 \times 10^{-5}}{3.5 \times 10^{-9}} = 2 \times 10^4$

14. $\frac{9 \times 10^{-3}}{3 \times 10^{-3}} = 3 \times 10^0$

15. $\frac{2.8 \times 10^0}{4 \times 10^{-7}} = 0.7 \times 10^7$
 $= 7 \times 10^6$

16. $\frac{2 \times 10^{-2}}{8 \times 10^{-11}} = 0.25 \times 10^9$
 $= 2.5 \times 10^8$