



## Multiplying Numbers Expressed in Scientific Notation

Name: \_\_\_\_\_ Per. \_\_\_\_\_

Evaluate each product. Express the results in both scientific notation and standard form.

1.  $(6.1 \times 10^5)(2 \times 10^5)$

2.  $(4.4 \times 10^6)(1.6 \times 10^{-9})$

3.  $(8.8 \times 10^8)(3.5 \times 10^{-13})$

4.  $(1.35 \times 10^8)(7.2 \times 10^{-4})$

5.  $(2.2 \times 10^{-12})(8 \times 10^6)$

6.  $(3.4 \times 10^{-5})(5.4 \times 10^{-4})$

7.  $(9.2 \times 10^{-3})(4 \times 10^8)$

8.  $(3.4 \times 10^4)(5 \times 10^4)$

9.  $(2.8 \times 10^{-4})(1.9 \times 10^7)$

10.  $(6.7 \times 10^{-7})(3 \times 10^3)$

11.  $(8.1 \times 10^5)(2.3 \times 10^{-3})$

12.  $(1.2 \times 10^{-11})(6 \times 10^6)$

13.  $(5.9 \times 10^4)(7 \times 10^{-8})$

14.  $(3 \times 10^8)(4 \times 10^{-2})$

15.  $(4 \times 10^5)(2 \times 10^3)$

16.  $(8 \times 10^{-13})(5 \times 10^4)$

17.  $(5 \times 10^{-12})(8.1 \times 10^{15})$

18.  $(3.5 \times 10)(4.5 \times 10^{-10})$

19. Light travels at a speed of  $3 \times 10^5$  kilometers per second. Light from Sirius A, the brightest star in the heavens, takes  $2.7 \times 10^8$  seconds to reach the earth. What is the distance to Sirius A?

### Mixed Review

1.  $\frac{xy^6}{y^4x}$

2.  $\frac{-2y^7}{14y^5}$

3.  $\left(\frac{2r^5w^3}{r^4w^3}\right)^4$

4.  $\frac{m^{-3}t^{-5}}{m^2t^3}$

5.  $4(p + 36) = 36$

6.  $5(f + 2) = 2(3 - f)$

7.  $5(x + 3) + 9 = 3(x - 2) + 6$

8.  $4(2a - 1) = 8a - 3$

9. The top of a square table is  $198 \text{ in}^2$ , what is the length of one side of the table? (round to the nearest tenth)

10. True or False  $\frac{2}{3}$  is a rational number.

