

Scientific Notation and Multiplication

Write each number in scientific notation.

1) 720000

7.2×10^5

3) 0.22

2.2×10^{-1}

5) 0.004

4×10^{-3}

7) 95000

9.5×10^4

Write each number in standard notation.

9) 3.7×10^2

370

11) 6×10^1

60

13) 7.1×10^0

7.1

15) 1.2×10^{-3}

.0012

2) 760000

7.6×10^5

4) 0.00079

7.9×10^{-4}

6) 910

9.1×10^2

8) 4

4×10^0

10) 2.44×10^{-2}

.0244

12) 4×10^{-5}

.00004

14) 4×10^{-3}

.004

16) 3.9×10^{-4}

.00039

Simplify. Write each answer in scientific notation.

17) $(8.4 \times 10^{-4})(5.53 \times 10^1)$

$$46.452 \times 10^{-3}$$

$$\boxed{4.6452 \times 10^{-2}}$$

19) $(4.4 \times 10^1)(2.25 \times 10^2)$

$$\boxed{9.9 \times 10^3}$$

21) $(6.08 \times 10^{-4})(6 \times 10^{-1})$

$$36.48 \times 10^{-5}$$

$$\boxed{3.648 \times 10^{-4}}$$

23) $(3 \times 10^6)(3.4 \times 10^3)$

$$10.2 \times 10^9$$

$$\boxed{1.02 \times 10^{10}}$$

25) $(7.6 \times 10^3)(2.8 \times 10^{-5})$

$$21.28 \times 10^{-2}$$

$$\boxed{2.128 \times 10^{-1}}$$

27) $(9 \times 10^{-2})(5 \times 10^{-6})$

$$45 \times 10^{-8}$$

$$\boxed{4.5 \times 10^{-7}}$$

29) $(2 \times 10^3)(7.6 \times 10^1)$

$$15.2 \times 10^4$$

$$\boxed{1.52 \times 10^5}$$

31) $(3.9 \times 10^{-2})(4.48 \times 10^2)$

$$17.472 \times 10^0$$

$$\boxed{1.7472 \times 10^1}$$

18) $(8.4 \times 10^{-6})(3.13 \times 10^{-2})$

$$26.292 \times 10^{-8}$$

$$\boxed{2.6292 \times 10^{-7}}$$

20) $(9 \times 10^3)(7 \times 10^{-6})$

$$63 \times 10^{-3}$$

$$\boxed{6.3 \times 10^{-2}}$$

22) $(1.2 \times 10^{-2})(8.7 \times 10^{-3})$

$$10.44 \times 10^{-5}$$

$$\boxed{1.044 \times 10^{-4}}$$

24) $(8.7 \times 10^4)(8.55 \times 10^1)$

$$74.385 \times 10^5$$

$$\boxed{7.4385 \times 10^6}$$

26) $(5 \times 10^{-1})(5.3 \times 10^3)$

$$26.5 \times 10^2$$

$$\boxed{2.65 \times 10^3}$$

28) $(2.22 \times 10^{-5})(6.8 \times 10^{-5})$

$$15.096 \times 10^{-10}$$

$$\boxed{1.5096 \times 10^{-9}}$$

30) $(6.7 \times 10^{-2})(5 \times 10^4)$

$$33.5 \times 10^2$$

$$\boxed{3.35 \times 10^3}$$

32) $(6 \times 10^{-3})(1.43 \times 10^{-1})$

$$\boxed{8.58 \times 10^{-4}}$$