

Name: _____ Date: _____

**Convert each number from scientific notation to real.**

(1) 2.8685×10^{-7}

(6) 4.9742×10^3

(2) 7.2692×10^{-2}

(7) 9.512×10^7

(3) 5.5781×10^{-3}

(8) 8.2514×10^3

(4) 1.214×10^0

(9) 1.838×10^{-7}

(5) 6.846×10^{-3}

(10) 4.127×10^2

**Convert each number from real to scientific notation.**

(11) 4,246

(16) 24.33

(12) 388.67

(17) 0.0009785

(13) 82.83

(18) 0.091757

(14) 0.00074649

(19) 6,453.8

(15) 0.002318

(20) 0.0000006218



Convert each number from scientific notation to real.

(1) 2.8685×10^{-7}
 0.00000028685

(6) 4.9742×10^3
 $4,974.2$

(2) 7.2692×10^{-2}
 0.072692

(7) 9.512×10^7
 $95,120,000$

(3) 5.5781×10^{-3}
 0.0055781

(8) 8.2514×10^3
 $8,251.4$

(4) 1.214×10^0
 1.214

(9) 1.838×10^{-7}
 0.0000001838

(5) 6.846×10^{-3}
 0.006846

(10) 4.127×10^2
 412.7



Convert each number from real to scientific notation.

(11) 4,246
 4.246×10^3

(16) 24.33
 2.433×10^1

(12) 388.67
 3.8867×10^2

(17) 0.0009785
 9.785×10^{-4}

(13) 82.83
 8.283×10^1

(18) 0.091757
 9.1757×10^{-2}

(14) 0.00074649
 7.4649×10^{-4}

(19) 6,453.8
 6.4538×10^3

(15) 0.002318
 2.318×10^{-3}

(20) 0.0000006218
 6.218×10^{-7}

Name: _____ Date: _____



Evaluate and express the result in scientific notation.

(1) $1.925 \times 10^4 \div 7.7 \times 10^7$

(6) $4.214 \times 10^{11} \div 8.6 \times 10^3$

(2) $7.7 \times 10^{-1} \times 4.7 \times 10^{-3}$

(7) $6.4 \times 10^{-7} \times 4.4 \times 10^{-7}$

(3) $7.4 \times 10^6 \times 4.7 \times 10^{-3}$

(8) $1.368 \times 10^2 \div 1.8 \times 10^{-6}$

(4) $3.15 \times 10^9 \div 7.5 \times 10^5$

(9) $3.132 \times 10^{15} \div 3.6 \times 10^4$

(5) $4.307 \times 10^{12} \div 7.3 \times 10^9$

(10) $5.8 \times 10^6 \times 8.5 \times 10^1$

Scientific Notation Operations

ANSWER KEY



Evaluate and express the result in scientific notation.

$$(1) \quad 1.925 \times 10^4 \div 7.7 \times 10^7$$
$$(1.925 \div 7.7) \times 10^{4-7}$$
$$0.25 \times 10^{-3}$$
$$2.5 \times 10^{-4}$$

$$(6) \quad 4.214 \times 10^{11} \div 8.6 \times 10^3$$
$$(4.214 \div 8.6) \times 10^{11-3}$$
$$0.49 \times 10^8$$
$$4.9 \times 10^7$$

$$(2) \quad 7.7 \times 10^{-1} \times 4.7 \times 10^{-3}$$
$$(7.7 \times 4.7) \times 10^{-1-3}$$
$$36.19 \times 10^{-4}$$
$$3.619 \times 10^{-3}$$

$$(7) \quad 6.4 \times 10^{-7} \times 4.4 \times 10^{-7}$$
$$(6.4 \times 4.4) \times 10^{-7-7}$$
$$28.16 \times 10^{-14}$$
$$2.816 \times 10^{-13}$$

$$(3) \quad 7.4 \times 10^6 \times 4.7 \times 10^{-3}$$
$$(7.4 \times 4.7) \times 10^{6-3}$$
$$34.78 \times 10^3$$
$$3.478 \times 10^4$$

$$(8) \quad 1.368 \times 10^2 \div 1.8 \times 10^{-6}$$
$$(1.368 \div 1.8) \times 10^{2-(-6)}$$
$$0.76 \times 10^8$$
$$7.6 \times 10^7$$

$$(4) \quad 3.15 \times 10^9 \div 7.5 \times 10^5$$
$$(3.15 \div 7.5) \times 10^{9-5}$$
$$0.042 \times 10^4$$
$$4.2 \times 10^2$$

$$(9) \quad 3.132 \times 10^{15} \div 3.6 \times 10^4$$
$$(3.132 \div 3.6) \times 10^{15-4}$$
$$0.87 \times 10^{11}$$
$$8.7 \times 10^{10}$$

$$(5) \quad 4.307 \times 10^{12} \div 7.3 \times 10^9$$
$$(4.307 \div 7.3) \times 10^{12-9}$$
$$0.59 \times 10^3$$
$$5.9 \times 10^2$$

$$(10) \quad 5.8 \times 10^6 \times 8.5 \times 10^1$$
$$(5.8 \times 8.5) \times 10^{6+1}$$
$$493 \times 10^7$$
$$4.93 \times 10^9$$

Name: _____ Date: _____



Evaluate and express the result in scientific notation.

(1) $1.63713 \times 10^{-8} \div 4.51 \times 10^{-7}$

(6) $4.74192 \times 10^{-5} \div 7.12 \times 10^{-12}$

(2) $6.01 \times 10^{-10} \times 2.33 \times 10^{-2}$

(7) $8.86 \times 10^4 \times 7.33 \times 10^{-1}$

(3) $7.01 \times 10^{-3} \times 1.23 \times 10^{-6}$

(8) $1.10656 \times 10^0 \div 5.32 \times 10^9$

(4) $2.46375 \times 10^{-9} \div 3.75 \times 10^{-12}$

(9) $9.83 \times 10^3 \times 6.61 \times 10^{-4}$

(5) $6.49257 \times 10^{23} \div 9.03 \times 10^{11}$

(10) $8.052 \times 10^{13} \div 2.64 \times 10^2$

Scientific Notation Operations

ANSWER KEY



Evaluate and express the result in scientific notation.

$$(1) \quad 1.63713 \times 10^{-8} \div 4.51 \times 10^{-7}$$

$$(1.63713 \div 4.51) \times 10^{-8 - (-7)}$$

$$0.363 \times 10^{-1}$$

$$3.63 \times 10^{-2}$$

$$(6) \quad 4.74192 \times 10^{-5} \div 7.12 \times 10^{-12}$$

$$(4.74192 \div 7.12) \times 10^{-5 - (-12)}$$

$$0.666 \times 10^7$$

$$6.66 \times 10^6$$

$$(2) \quad 6.01 \times 10^{-10} \times 2.33 \times 10^{-2}$$

$$(6.01 \times 2.33) \times 10^{-10 + (-2)}$$

$$14.0033 \times 10^{-12}$$

$$1.40033 \times 10^{-11}$$

$$(7) \quad 8.86 \times 10^4 \times 7.33 \times 10^{-1}$$

$$(8.86 \times 7.33) \times 10^{4 + (-1)}$$

$$64.9438 \times 10^3$$

$$6.49438 \times 10^4$$

$$(3) \quad 7.01 \times 10^{-3} \times 1.23 \times 10^{-6}$$

$$(7.01 \times 1.23) \times 10^{-3 + (-6)}$$

$$8.6223 \times 10^{-9}$$

$$(8) \quad 1.10656 \times 10^0 \div 5.32 \times 10^9$$

$$(1.10656 \div 5.32) \times 10^{0 - 9}$$

$$0.208 \times 10^{-9}$$

$$2.08 \times 10^{-10}$$

$$(4) \quad 2.46375 \times 10^{-9} \div 3.75 \times 10^{-12}$$

$$(2.46375 \div 3.75) \times 10^{-9 - (-12)}$$

$$0.657 \times 10^3$$

$$6.57 \times 10^2$$

$$(9) \quad 9.83 \times 10^3 \times 6.61 \times 10^{-4}$$

$$(9.83 \times 6.61) \times 10^{3 + (-4)}$$

$$64.9763 \times 10^{-1}$$

$$6.49763 \times 10^0$$

$$(5) \quad 6.49257 \times 10^{23} \div 9.03 \times 10^{11}$$

$$(6.49257 \div 9.03) \times 10^{23 - 11}$$

$$0.719 \times 10^{12}$$

$$7.19 \times 10^{11}$$

$$(10) \quad 8.052 \times 10^{13} \div 2.64 \times 10^2$$

$$(8.052 \div 2.64) \times 10^{13 - 2}$$

$$0.305 \times 10^{11}$$

$$3.05 \times 10^{10}$$