

## Scientific Notation

Mixed: ES1

Example: 1

Write 6, 224 in scientific notation.

We should move the decimal point 3 places to the left. So, the exponent will be 3.

$$6,224 = 6.224 \times 10^3$$

Example: 2

Write 0.0087 in scientific notation.

We should move the decimal point 3 places to the right. So, the exponent will be -3.

$$0.0087 = 8.7 \times 10^{-3}$$

Express each number in scientific notation.

1)  $0.0259 =$  \_\_\_\_\_

2)  $902 =$  \_\_\_\_\_

3)  $5,5820 =$  \_\_\_\_\_

4)  $0.315 =$  \_\_\_\_\_

5)  $0.00973 =$  \_\_\_\_\_

6)  $1,0006 =$  \_\_\_\_\_

7)  $856 =$  \_\_\_\_\_

8)  $0.2058 =$  \_\_\_\_\_

9)  $0.00072 =$  \_\_\_\_\_

10)  $5,008 =$  \_\_\_\_\_

11)  $0.001216 =$  \_\_\_\_\_

12)  $0.00145 =$  \_\_\_\_\_

13)  $7,5919 =$  \_\_\_\_\_

14)  $0.12 =$  \_\_\_\_\_

## Scientific Notation - Standard

Mixed: ES1

Example: 1Write  $3.25 \times 10^2$  in standard notation.

Here the exponent is 2. We should move the decimal point 2 places to the right.

$$\begin{array}{c}
 3 \quad \overbrace{2 \quad 5} \\
 \downarrow \quad \downarrow \\
 3.25 \times 10^2 = \mathbf{325}
 \end{array}$$

Example: 2Write  $8.76 \times 10^{-2}$  in standard notation.

Here the exponent is -2. We should move the decimal point 2 places to the left.

$$\begin{array}{c}
 0 \quad \overbrace{0 \quad 8 \quad 7 \quad 6} \\
 \downarrow \quad \downarrow \\
 8.76 \times 10^{-2} = \mathbf{0.0876}
 \end{array}$$

Express each number in standard notation.

1)  $9.63 \times 10^{-3} =$  \_\_\_\_\_

2)  $5.1146 \times 10^3 =$  \_\_\_\_\_

3)  $3.042 \times 10^2 =$  \_\_\_\_\_

4)  $7.259 \times 10^4 =$  \_\_\_\_\_

5)  $9.105 \times 10^{-2} =$  \_\_\_\_\_

6)  $6.5 \times 10^{-5} =$  \_\_\_\_\_

7)  $6.1 \times 10^4 =$  \_\_\_\_\_

8)  $9.8 \times 10^{-1} =$  \_\_\_\_\_

9)  $2.9854 \times 10^{-1} =$  \_\_\_\_\_

10)  $8.432 \times 10^4 =$  \_\_\_\_\_

11)  $1.05 \times 10^2 =$  \_\_\_\_\_

12)  $2.8502 \times 10^{-3} =$  \_\_\_\_\_

13)  $4.172 \times 10^{-4} =$  \_\_\_\_\_

14)  $9.7 \times 10^5 =$  \_\_\_\_\_

Name : \_\_\_\_\_

Score : \_\_\_\_\_

## Standard and Scientific Notations

Mixed: ES1

Express each number in scientific notation.

1) 0.0056 = \_\_\_\_\_

2) 24,010 = \_\_\_\_\_

3) 4,085 = \_\_\_\_\_

4) 0.017 = \_\_\_\_\_

5) 0.000796 = \_\_\_\_\_

6) 952 = \_\_\_\_\_

7) 50,413 = \_\_\_\_\_

8) 0.004 = \_\_\_\_\_

Express each number in standard notation.

9)  $2.445 \times 10^3$  = \_\_\_\_\_

10)  $1.04 \times 10^{-4}$  = \_\_\_\_\_

11)  $9.165 \times 10^{-2}$  = \_\_\_\_\_

12)  $5.962 \times 10^3$  = \_\_\_\_\_

13)  $2.2 \times 10^{-5}$  = \_\_\_\_\_

14)  $3.12 \times 10^{-1}$  = \_\_\_\_\_

15)  $8.0447 \times 10^4$  = \_\_\_\_\_

16)  $1.278 \times 10^2$  = \_\_\_\_\_

Name : \_\_\_\_\_

Score : \_\_\_\_\_

Teacher : \_\_\_\_\_

Date : \_\_\_\_\_

## Scientific Notation

Write each number in standard format.

- 1 )  $5.8201 \times 10^9$  = \_\_\_\_\_
- 2 )  $3.3743 \times 10^1$  = \_\_\_\_\_
- 3 )  $1.8107 \times 10^{-7}$  = \_\_\_\_\_
- 4 )  $7.49 \times 10^{-9}$  = \_\_\_\_\_
- 5 )  $3.793 \times 10^{-2}$  = \_\_\_\_\_
- 6 )  $8.4515 \times 10^8$  = \_\_\_\_\_
- 7 )  $8.6213 \times 10^{-4}$  = \_\_\_\_\_
- 8 )  $7.5778 \times 10^2$  = \_\_\_\_\_
- 9 )  $5.567 \times 10^{-5}$  = \_\_\_\_\_
- 10 )  $6.85 \times 10^6$  = \_\_\_\_\_

Write each number in scientific notation.

- 11 ) 2869.4 = \_\_\_\_\_
- 12 ) 0.122 = \_\_\_\_\_
- 13 ) 51360 = \_\_\_\_\_
- 14 ) 0.005542 = \_\_\_\_\_
- 15 ) 0.000002470 = \_\_\_\_\_
- 16 ) 879000 = \_\_\_\_\_
- 17 ) 0.0006123 = \_\_\_\_\_
- 18 ) 17300 = \_\_\_\_\_
- 19 ) 28690000 = \_\_\_\_\_
- 20 ) 0.000000080940 = \_\_\_\_\_