

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

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

## Scientific Notation

### Example: 1

Write 600,784 in scientific notation.

6 0 0 7 8 4 .

We should move the decimal point 5 places to the left. So, the exponent will be 5.

$$600,784 = 6.00784 \times 10^5$$

### Example: 2

Write 0.0000071 in scientific notation.

0 . 0 0 0 0 0 7 1

We should move the decimal point 6 places to the right. So, the exponent will be -6.

$$0.0000071 = 7.1 \times 10^{-6}$$

Express each number in scientific notation.

1) 0.0000000026 = \_\_\_\_\_

2) 651,400 = \_\_\_\_\_

3) 0.00000154 = \_\_\_\_\_

4) 200,000,000 = \_\_\_\_\_

5) 0.00000087 = \_\_\_\_\_

6) 5,284,400,000 = \_\_\_\_\_

7) 0.000000000044391 = \_\_\_\_\_

8) 0.0000612 = \_\_\_\_\_

9) 4,005,000 = \_\_\_\_\_

10) 0.000000000000206 = \_\_\_\_\_

## Answer key

Example: 1

Write 600,784 in scientific notation.

We should move the decimal point 5 places to the left. So, the exponent will be 5.

$$600,784 = 6.00784 \times 10^5$$

Example: 2

Write 0.0000071 in scientific notation.

We should move the decimal point 6 places to the right. So, the exponent will be -6.

$$0.0000071 = 7.1 \times 10^{-6}$$

Express each number in scientific notation.

$$1) \quad 0.0000000026 \quad = \quad \underline{2.6 \times 10^{-9}}$$

$$2) \quad 651,400 \quad = \quad \underline{6.514 \times 10^5}$$

$$3) \quad 0.00000154 \quad = \quad \underline{1.54 \times 10^{-6}}$$

$$4) \quad 200,000,000 \quad = \quad \underline{2 \times 10^8}$$

$$5) \quad 0.00000087 \quad = \quad \underline{8.7 \times 10^{-7}}$$

$$6) \quad 5,284,400,000 \quad = \quad \underline{5.2844 \times 10^9}$$

$$7) \quad 0.000000000044391 \quad = \quad \underline{4.4391 \times 10^{-11}}$$

$$8) \quad 0.0000612 \quad = \quad \underline{6.12 \times 10^{-5}}$$

$$9) \quad 4,005,000 \quad = \quad \underline{4.005 \times 10^6}$$

$$10) \quad 0.000000000000206 \quad = \quad \underline{2.06 \times 10^{-13}}$$