

Scientific Notation Practice

Name: _____

Date: _____

Question 1

Convert to standard notation

I. 9.35×10^4

II. 4.1×10^{-4}

III. 1×10^5

IV. 5×10^{-2}

V. 7.75×10^{-2}

VI. 2.3×10^3

Scientific Notation Practice

Question 2

Convert to scientific notation

I. 7,000,000

II. 0.00035

III. 885

IV. 0.0678

V. 45,000

VI. 0.00098

Scientific Notation Practice

Name: _____ **Key** _____

Date: _____

Question 1

Convert to standard notation

I. 9.35×10^4

$$\begin{array}{ccccccc} 9 & . & 3 & 5 & 0 & 0 & . \\ \hline & & 1 & 2 & 3 & 4 & \\ \uparrow & & & & & & \end{array} = 93,500.$$

II. 4.1×10^{-4}

$$\begin{array}{ccccccc} 0 & . & 0 & 0 & 0 & 4 & . & 1 \\ \hline & & 4 & 3 & 2 & 1 & \\ \uparrow & & & & & & \end{array} = 0.00041$$

III. 1.0×10^5

$$\begin{array}{ccccccc} 1 & . & 0 & 0 & 0 & 0 & 0 & . \\ \hline & & 1 & 2 & 3 & 4 & 5 & \\ \uparrow & & & & & & \end{array} = 100,000.$$

IV. 5.0×10^{-2}

$$\begin{array}{ccccccc} 0 & . & 0 & 5 & . & 0 \\ \hline & & 2 & 1 & \\ \uparrow & & & & \end{array} = 0.050$$

V. 7.75×10^{-2}

$$\begin{array}{ccccccc} 0 & . & 0 & 7 & 7 & 5 \\ \hline & & 2 & 1 & \\ \uparrow & & & & \end{array} = 0.0775$$

VI. 2.3×10^3

$$\begin{array}{ccccccc} 2 & . & 3 & 0 & 0 & . \\ \hline & & 1 & 2 & 3 & \\ \uparrow & & & & \end{array} = 2,300$$

Scientific Notation Practice

Question 2

Convert to scientific notation

I. 7,000,000

$$\begin{array}{ccccccc} 7 & . & 0 & 0 & 0 & 0 & 0 & 0 \\ \uparrow & & | & | & | & | & | & | \\ 6 & 5 & 4 & 3 & 2 & 1 & & \end{array} = 7.0 \times 10^6$$

II. 0.00035

$$\begin{array}{ccccccc} 0 & . & 0 & 0 & 0 & 3 & . & 5 \\ & & | & | & | & | & & \uparrow \\ & & 1 & 2 & 3 & 4 & & \end{array} = 3.5 \times 10^{-4}$$

III. 885

$$\begin{array}{ccc} 8 & . & 8 & 5 \\ \uparrow & & | & | \\ 2 & 1 & & \end{array} = 8.85 \times 10^2$$

IV. 0.0678

$$\begin{array}{ccccccc} 0 & . & 0 & 6 & . & 7 & 8 \\ & & | & | & & | & \uparrow \\ & & 1 & 2 & & & \end{array} = 6.78 \times 10^{-2}$$

V. 45,000

$$\begin{array}{ccccccc} 4 & . & 5 & 0 & 0 & 0 & . \\ \uparrow & & | & | & | & | & \\ 4 & 3 & 2 & 1 & & & \end{array} = 4.5 \times 10^4$$

VI. 0.00098

$$\begin{array}{ccccccc} 0 & . & 0 & 0 & 0 & 9 & . & 8 \\ & & | & | & | & | & & \uparrow \\ & & 1 & 2 & 3 & 4 & & \end{array} = 9.8 \times 10^{-4}$$