

Scientific Notation

Mul/Div: MS1

Simplify and express in scientific notation:

Example 1

$(5 \times 10^6) (7 \times 10^9)$

$$\begin{aligned} (5 \times 10^6) (7 \times 10^9) &= 35 \times 10^6 \times 10^9 \\ &= 35 \times 10^{15} \\ &= \mathbf{3.5 \times 10^{16}} \end{aligned}$$

Example 2

$$\begin{aligned} \frac{9 \times 10^8}{8 \times 10^{-2}} &= \frac{9}{8} \times 10^8 \times 10^2 \\ &= \mathbf{1.125 \times 10^{10}} \end{aligned}$$

Simplify each problem.

1) $(2 \times 10^7) (9 \times 10^9)$

Answer : _____

3) $\frac{15 \times 10^{-7}}{16 \times 10^{-5}}$

Answer : _____

5) $(8 \times 10^{-7}) (3 \times 10^9)$

Answer : _____

7) $\frac{4 \times 10^8}{1 \times 10^4}$

Answer : _____

8) $(4 \times 10^3) (4 \times 10^7)$

Answer : _____

PREVIEW

Gain complete access to the largest
collection of worksheets in all subjects!

Members, please
log in to
download this
worksheet.

Not a member?
Please sign up to
gain complete
access.

www.mathworksheets4kids.com

Scientific Notation

Mul/Div: MS1

Simplify and express in scientific notation:

Example 1

$(5 \times 10^6) (7 \times 10^9)$

$$\begin{aligned} (5 \times 10^6) (7 \times 10^9) &= 35 \times 10^6 \times 10^9 \\ &= 35 \times 10^{15} \\ &= \mathbf{3.5 \times 10^{16}} \end{aligned}$$

Example 2

$$\begin{aligned} \frac{9 \times 10^8}{8 \times 10^{-2}} &= \frac{9}{8} \times 10^8 \times 10^2 \\ &= \mathbf{1.125 \times 10^{10}} \end{aligned}$$

Simplify each problem.

1) $(2 \times 10^7) (9 \times 10^9)$

Answer : _____

3) $\frac{15 \times 10^{-7}}{16 \times 10^{-5}}$

Answer : _____

5) $(8 \times 10^{-7}) (3 \times 10^9)$

Answer : $\mathbf{2.4 \times 10^{-12}}$

7) $\frac{4 \times 10^8}{1 \times 10^4}$

Answer : $\mathbf{4 \times 10^4}$

8) $(4 \times 10^3) (4 \times 10^7)$

Answer : $\mathbf{1.6 \times 10^{11}}$

PREVIEW

Gain complete access to the largest collection of worksheets in all subjects!

Members, please log in to download this worksheet.

Not a member? Please sign up to gain complete access.

www.mathworksheets4kids.com $\mathbf{3.75 \times 10^2}$ $\mathbf{6.3 \times 10^{14}}$