SCIENTIFIC NOTATION

Simplify and express the answer in scientific notation.

$(3.2 \times 10^5) (2 \times 10^2)$

$= (3.2 \times 2) (10^5 \times 10^2)$

$= (3.2 \times 2) (10^7)$

$\mathbf{= 6.4 \times 10^7}$

$\dfrac{1.2 \times 10^6}{4 \times 10^4}$

$= (0.3) (10^{6-4})$

$\mathbf{= 3 \times 10^1}$

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1) $(2.1 \times 10^4) (4 \times 10^5)$

5) $\dfrac{8.1 \times 10^4}{9 \times 10^5}$

2) $(5.8 \times 10^{-1}) (6.2 \times 10^{-2})$

6) $(8.9 \times 10^2) (1.6 \times 10^2)$

3) $\dfrac{1.6 \times 10^8}{2 \times 10^6}$

7) $\dfrac{3.2 \times 10^{-2}}{1.6 \times 10^{-5}}$

4) $(9 \times 10^5) (1.4 \times 10^8)$

8) $\dfrac{3.5 \times 10^8}{0.5 \times 10^6}$

SCIENTIFIC NOTATION

Answer key

Simplify and express the answer in scientific notation.

$(3.2 \times 10^5) (2 \times 10^2)$

$= (3.2 \times 2) (10^5 \times 10^2)$

$= (3.2 \times 2) (10^7)$

$\mathbf{= 6.4 \times 10^7}$

$\dfrac{1.2 \times 10^6}{4 \times 10^4}$

$= (0.3) (10^{6-4})$

$\mathbf{= 3 \times 10^1}$

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1) $(2.1 \times 10^4) (4 \times 10^5)$

8.4×10^9

2) $(5.8 \times 10^{-1}) (6.2 \times 10^{-2})$

3.596×10^{-2}

3) $\dfrac{1.6 \times 10^8}{2 \times 10^6}$

8×10^1

4) $(9 \times 10^5) (1.4 \times 10^8)$

1.26×10^{14}

5) $\dfrac{8.1 \times 10^4}{9 \times 10^5}$

9×10^{-2}

6) $(8.9 \times 10^2) (1.6 \times 10^2)$

1.424×10^5

7) $\dfrac{3.2 \times 10^{-2}}{1.6 \times 10^{-5}}$

2×10^3

8) $\dfrac{3.5 \times 10^8}{0.5 \times 10^6}$

7×10^2