

P.S. #2.3 - Multiplying and Dividing Numbers in Scientific Notation

Name: _____ Class: _____

Convert each number to scientific notation.

1.) 4523

2.) 0.00000893

3.) $0.051 \cdot 10^8$

4.) $872 \cdot 10^{-4}$

Convert each number to standard notation.

5.) $2.51 \cdot 10^{-5}$

6.) $3.76 \cdot 10^4$

Rewrite each number as the product of a coefficient and 10^4 .

7.) $8.4 \cdot 10^5$

8.) $9.36 \cdot 10^6$

Rewrite each number as the product of a coefficient and 10^{-3} .

9.) $7.62 \cdot 10^{-2}$

10.) $5.1 \cdot 10^{-5}$

Perform the following operations.

11.) $(3.7 \cdot 10^8)(4 \cdot 10^5)$

12.) $\frac{3.2 \cdot 10^7}{8 \cdot 10^3}$

$$13.) \frac{6 \cdot 10^9}{2 \cdot 10^5}$$

$$14.) (2 \cdot 10^{-4})(8.1 \cdot 10^{-1})$$

$$15.) (7 \cdot 10^5)(9 \cdot 10^{-4})$$

$$16.) \frac{5.2 \cdot 10^4}{6.5 \cdot 10^9}$$

$$17.) (2.5 \cdot 10^{-4})(3.1 \cdot 10^7)$$

$$18.) (6 \cdot 10^8)(45 \cdot 10^{11})$$

$$19.) \frac{8 \cdot 10^7}{0.2 \cdot 10^{-6}}$$

$$20.) (123 \cdot 10^{-12})(82 \cdot 10^{-45})$$