

Algebra 1 7.4

*8th grade standard

Express numbers in scientific notation*

Find products and quotients of numbers in scientific notation

scientific notation

exponent

standard form

activity: triangle puzzles
whiteboards

$$31.486000^{-7}$$
$$3.1486 \times 10^7$$

$$(\quad) \times 10^{\circ}$$
$$\uparrow 2.3 \times 10^4 \downarrow$$
$$23000$$

Express each number in scientific notation

Guided Practice

1A. 68,700,000,000

1B. 0.0000725

$$(\quad) \times 10^{(\quad)}$$

Express each number in standard form

2A. 3.201×10^6

2B. 9.03×10^{-5}

Evaluate each quotient. Express the results in both scientific notation and standard form.

$$4A. \frac{2.3958 \times 10^3}{1.98 \times 10^8} \quad 3-8$$

$$\downarrow \underline{1.21 \times 10^{-5}} \uparrow$$

.0000121

$$4B. \frac{1.305 \times 10^3}{1.45 \times 10^{-4}} \quad 3+4$$

$$\underline{0.9 \times 10^7} \quad \begin{matrix} +1 \\ -1 \end{matrix}$$
$$\uparrow 9 \times 10^6 \downarrow$$

9,000,000

Triangle puzzles

$$\sqrt{37} \quad (37)^{\frac{1}{2}}$$

$$3\sqrt{(x)} \quad 3(x)^{\frac{1}{2}}$$

$$7xy^{\frac{1}{3}} \quad 7x\sqrt[3]{y}$$