CW 4.3.2 Name_____

The speed of light is 3×10^8 meters/second. If the sun is 1.5×10^{11} meters from earth, how many seconds does it take light to reach the earth. Express your answer in scientific notation.

$(3 \times 10^8)(1.5 \times 10^{11})$

$(3 \times 1.5)(10^8 \times 10^{11})$

4.5×10^{19}

Computing with Scientific Notation

Write your answer in scientific notation.

Hint: Use your properties

$(3 \times 10^5)(2 \times 10^9)$

$(3 \times 2)(10^5 \times 10^9)$

6×10^{14}

$(2 \times 10^6)(1.5 \times 10^{12})$

3×10^{18}

$(4 \times 10^8)(2 \times 10^{-4})$

8×10^4

$(5 \times 10^{-7})(1.7 \times 10^{-8})$

8.5×10^{-15}

Computing with Scientific Notation

Write your answer in scientific notation.

Hint: Use your properties

$(3.8 \times 10^3)(4.1 \times 10^4)$

$(3.8 \times 4.1)(10^3 \times 10^4)$

15.58×10^7

1.558×10^8

$(2.5 \times 10^4)(5.8 \times 10^2)$

$(2.5 \times 5.8)(10^4 \times 10^2)$

14.5×10^6

1.45×10^7

$(4.9 \times 10^{-6})(3.2 \times 10^8)$

$15.68 \cdot 10^2$

$1.568 \cdot 10^3$

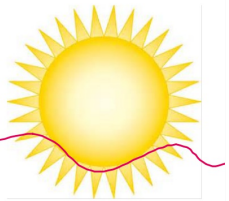
$(1.8 \times 10^{-4})(6.7 \times 10^{-5})$

$12.06 \cdot 10^{-9}$

1.206×10^{-8}

1257.34×10^4

1.25734×10^7



Astronomy:

The sun burns about 4.4×10^6 tons of hydrogen per second. How much hydrogen does the Sun burn in one year? (Hint: one year = 3.16×10^7 seconds)

Write your answer in scientific notation.

$(4.4 \times 10^6)(3.16 \times 10^7)$

13.904×10^{13}

1.3904×10^{14}