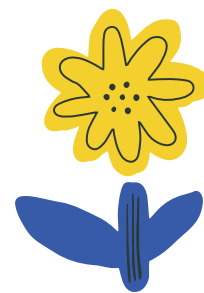


FIND THE ERROR:

Operations With Numbers in Scientific Notation



In each problem below, a student tried to complete an addition, subtraction, multiplication, or division problem with numbers in scientific notation but made an error. Circle the error in each student's work, explain what the error is, and show how to correctly perform the operation. Write your answers in scientific notation.

Lin

Circle the error:

$$(7.6 \times 10^8) - (4 \times 10^8)$$

$$(7.6 - 4) \times 10^8$$

$$7.2 \times 10^8$$

$$\text{Answer: } 7.2 \times 10^8$$

Show the correct work:

Answer: _____

What error did Lin make? _____

Isaac

Circle the error:

$$(3.3 \times 10^4)(1.7 \times 10^5)$$

$$(3.3 \times 1.7)(10^4 \times 10^5)$$

$$5.61 \times 10^{20}$$

$$\text{Answer: } 5.61 \times 10^{20}$$

Show the correct work:

Answer: _____

What error did Isaac make? _____

Emily

Circle the error:

$$(5.7 \times 10^6) + (2.9 \times 10^5)$$

$$[(5.7 \times 10) \times 10^5] + (2.9 \times 10^5)$$

$$(5.7 \times 10^5) + (2.9 \times 10^5)$$

$$(5.7 + 2.9) \times 10^5$$

$$8.6 \times 10^5$$

$$\text{Answer: } 8.6 \times 10^5$$

Show the correct work:

Answer: _____

What error did Emily make? _____

FIND THE ERROR:**Operations With Numbers in Scientific Notation**

Keep going! Circle the error in each student's work, explain what the error is, and show how to correctly perform the operation. Write your answers in scientific notation.

Sanjay

Circle the error:

$$(3.6 \times 10^9) \div (9 \times 10^3)$$

$$(3.6 \div 9) \times (10^9 \div 10^3)$$

$$0.4 \times 10^3$$

$$4 \times 10^2$$

Answer: 4×10^2

Show the correct work:

Answer: _____

What error did Sanjay make? _____

Anita

Circle the error:

$$(5.5 \times 10^5) + (3.8 \times 10^4)$$

$$[(5.5 \times 10) \times 10^4] + (3.8 \times 10^4)$$

$$(55 \times 10^4) + (3.8 \times 10^4)$$

$$(55 + 3.8) \times 10^4$$

$$58.8 \times 10^4$$

$$5.88 \times 10^4$$

Answer: 5.88×10^4

Show the correct work:

Answer: _____

What error did Anita make? _____

Jaden

Circle the error:

$$(7.6 \times 10^{-6})(4.7 \times 10^4)$$

$$(7.6 \times 4.7)(10^{-6} \times 10^4)$$

$$35.72 \times 10^2$$

$$3.572 \times 10^3$$

Answer: 3.572×10^3

Show the correct work:

Answer: _____

What error did Jaden make? _____