

Key

Operations with Scientific Notation - Practice

Addition and Subtraction

Before numbers in scientific notation can be added or subtracted, the exponents must be equal.

$$(3.4 \times 10^2) + (4.57 \times 10^3) = (0.34 \times 10^3) + (4.57 \times 10^3)$$

↑ ↓ ↓
Not equal Equal
The decimal is moved to the left to increase the exponent. = $(0.34 + 4.57) \times 10^3$
= 4.91×10^3

1. $(9.19 \times 10^3) + (2.3 \times 10^4)$

$0.919 \times 10^4 + 2.3 \times 10^4$
 3.219×10^4

2. $(5 \times 10^4) - (4 \times 10^2)$

$5 \times 10^4 - 0.04 \times 10^4$
 4.96×10^4

3. $(6.75 \times 10^4) - (2 \times 10^1)$

$6.75 \times 10^4 - 0.002 \times 10^4$
 6.748×10^4

4. $(1.2 \times 10^{-3}) + (8.9 \times 10^{-3})$

10.1×10^{-3}
 1.01×10^{-2}

5. $(9.99 \times 10^{-2}) - (1.2 \times 10^{-3})$

$9.99 \times 10^{-2} - 0.12 \times 10^{-2}$
 9.87×10^{-2}

6. $(4.3 \times 10^7) - (7.5 \times 10^5)$

$4.3 \times 10^7 - 0.075 \times 10^7$
 4.225×10^7

7. $(2.345 \times 10^2) + (1.31 \times 10^0)$

$2.345 \times 10^2 + 0.131 \times 10^2$
 2.3581×10^2

8. $(7.5 \times 10^{-2}) - (2 \times 10^{-4})$

$7.5 \times 10^{-2} - 0.02 \times 10^{-2}$
 7.48×10^{-2}

Addition and Subtraction With Scientific Notation

Simplify. Write each answer in scientific notation.

1) $3.1 \times 10^3 + 4.3 \times 10^3$

7.4×10^3

2) $3 \times 10^1 + 6.4 \times 10^2$

$0.3 \times 10^2 + 6.4 \times 10^2$

6.7×10^2

3) $2.4 \times 10^4 + 5.57 \times 10^3$

$2.4 \times 10^4 + 0.557 \times 10^4$

2.957×10^4

5) $2.5 \times 10^1 + 6.14 \times 10^4$

$0.0025 \times 10^4 + 6.14 \times 10^4$

6.1425×10^4

7) $5 \times 10^{-3} + 3.3 \times 10^{-6}$

$5 \times 10^{-3} + 0.0033 \times 10^{-3}$

5.0033×10^{-3}

9) $1.39 \times 10^5 - 4 \times 10^2$

$1.39 \times 10^5 - 0.004 \times 10^5$

1.386×10^5

11) $8.14 \times 10^5 - 7.8 \times 10^2$

$8.14 \times 10^5 - 0.0078 \times 10^5$

81322×10^5

13) $5.1 \times 10^{-1} + 0.38 \times 10^4$

$0.000051 \times 10^4 + 0.38 \times 10^4$

0.380051×10^4

3.80051×10^3

2) $3 \times 10^1 + 6.4 \times 10^2$

$0.3 \times 10^2 + 6.4 \times 10^2$

6.7×10^2

4) $5 \times 10^{-2} + 1.6 \times 10^{-3}$

$5 \times 10^{-2} + 0.16 \times 10^{-2}$

5.16×10^{-2}

6) $7 \times 10^{-1} + 6.4 \times 10^{-5}$

$7 \times 10^{-1} + 0.00064 \times 10^{-1}$

7.00064×10^{-1}

8) $8 \times 10^{-1} + 6.9 \times 10^3$

$0.0008 \times 10^3 + 6.9 \times 10^3$

6.9008×10^3

10) $2.74 \times 10^{-1} - 6.53 \times 10^{-4}$

$2.74 \times 10^{-1} - 0.000653 \times 10^{-1}$

2.73347×10^{-1}

12) $6.36 \times 10^3 - 5.8 \times 10^{-1}$

$6.36 \times 10^3 - 0.00058 \times 10^3$

6.35942×10^3

14) $5.9 \times 10^{-2} - 0.078 \times 10^3$

$0.000059 \times 10^3 - 0.078 \times 10^3$

-0.071941×10^3

-7.7941×10^1