

Standard form

[CONTENTS](#)

Worked example

Write as an ordinary number:

$$3.5 \times 10^4$$

$$7.42 \times 10^5$$

Your turn

Write as an ordinary number:

$$5.3 \times 10^3$$

5300

$$2.47 \times 10^6$$

2470000

Worked example

Write as an ordinary number:

$$3.5 \times 10^{-4}$$

$$7.42 \times 10^{-5}$$

Your turn

Write as an ordinary number:

$$5.3 \times 10^{-3}$$

0.0053

$$2.47 \times 10^{-6}$$

0.00000247

Worked example

Write in standard form:

30000

3500

357000

Your turn

Write in standard form:

5000

5×10^3

53000

5.3×10^4

53700000

5.37×10^7

Worked example

Write in standard form:

0.3

0.03

0.0000357

Your turn

Write in standard form:

0.005

5×10^{-3}

0.00053

5.3×10^{-4}

0.000000537

5.37×10^{-7}

Worked example

Write in standard form:

$$35 \times 10^4$$

$$0.35 \times 10^4$$

$$0.035 \times 10^{-4}$$

Your turn

Write in standard form:

$$53 \times 10^6$$

$$5.3 \times 10^7$$

$$0.53 \times 10^7$$

$$5.3 \times 10^6$$

$$0.0053 \times 10^{-8}$$

$$5.3 \times 10^{-11}$$

Worked example

Write the answer in standard form:

$$(4 \times 10^6) + (5 \times 10^6)$$

$$(4 \times 10^6) + (9 \times 10^6)$$

Your turn

Write the answer in standard form:

$$(7 \times 10^3) + (8 \times 10^3)$$

$$1.5 \times 10^4$$

Worked example

Write the answer in standard form:

$$(4 \times 10^7) + (5 \times 10^6)$$

$$(4 \times 10^7) + (9 \times 10^5)$$

Your turn

Write the answer in standard form:

$$(7 \times 10^4) + (8 \times 10^3)$$

$$7.8 \times 10^4$$

Worked example

Write the answer in standard form:

$$(4 \times 10^{-7}) + (5 \times 10^{-6})$$

$$(4 \times 10^{-3}) + (9 \times 10^{-5})$$

Your turn

Write the answer in standard form:

$$(7 \times 10^{-4}) + (8 \times 10^{-3})$$

$$8.7 \times 10^{-3}$$

Worked example

Write the answer in standard form:

$$(5 \times 10^6) - (4 \times 10^6)$$

$$(9 \times 10^6) - (4 \times 10^6)$$

Your turn

Write the answer in standard form:

$$(8 \times 10^3) - (7 \times 10^3)$$

$$1 \times 10^3$$

Worked example

Write the answer in standard form:

$$(5 \times 10^7) - (4 \times 10^6)$$

$$(9 \times 10^7) - (4 \times 10^5)$$

Your turn

Write the answer in standard form:

$$(8 \times 10^5) - (7 \times 10^3)$$

$$7.93 \times 10^5$$

Worked example

Write the answer in standard form:

$$(5 \times 10^{-6}) - (4 \times 10^{-7})$$

$$(9 \times 10^{-5}) - (4 \times 10^{-7})$$

Your turn

Write the answer in standard form:

$$(8 \times 10^{-3}) - (7 \times 10^{-5})$$

$$7.93 \times 10^{-3}$$

Worked example

Write the answer in standard form:

$$(3 \times 10^6) \times (2 \times 10^4)$$

$$(3 \times 10^6) \times (4 \times 10^4)$$

Your turn

Write the answer in standard form:

$$(2 \times 10^3) \times (7 \times 10^5)$$

$$1.4 \times 10^9$$

Worked example

Write the answer in standard form:

$$(3 \times 10^6) \times (2 \times 10^{-4})$$

$$(3 \times 10^6) \times (5 \times 10^{-2})$$

Your turn

Write the answer in standard form:

$$(2 \times 10^8) \times (7 \times 10^{-5})$$

$$1.4 \times 10^4$$

Worked example

Write the answer in standard form:

$$(4 \times 10^6) \div (2 \times 10^3)$$

$$(4 \times 10^6) \div (8 \times 10^3)$$

Your turn

Write the answer in standard form:

$$(6 \times 10^7) \div (8 \times 10^3)$$

$$7.5 \times 10^3$$

Worked example

Write the answer in standard form:

$$\frac{4 \times 10^6}{2 \times 10^{-3}}$$

$$\frac{4 \times 10^{-5}}{8 \times 10^{-3}}$$

Your turn

Write the answer in standard form:

$$\frac{6 \times 10^{-7}}{8 \times 10^{-3}}$$

$$7.5 \times 10^{-5}$$

Worked example

Write the answer in standard form:

$$(4 \times 10^5) \times (1.3 \times 10^7)$$

$$(5 \times 10^4) \times (3.1 \times 10^7)$$

Your turn

Write the answer in standard form:

$$(6 \times 10^3) \times (2.5 \times 10^4)$$

$$1.5 \times 10^8$$

Worked example

Write the answer in standard form:

$$\frac{4.6 \times 10^6}{2.3 \times 10^{-3}}$$

$$\frac{6.48 \times 10^{-5}}{8.64 \times 10^{-3}}$$

Your turn

Write the answer in standard form:

$$\frac{6.45 \times 10^{-7}}{8.6 \times 10^{-3}}$$

$$7.5 \times 10^{-5}$$

Worked example

Write the answer in standard form:

$$\frac{(4.6 \times 10^6) \times (2 \times 10^8)}{2.3 \times 10^{-3}}$$

$$\frac{(6.48 \times 10^{-5}) \times (3 \times 10^2)}{8.64 \times 10^{-3}}$$

Your turn

Write the answer in standard form:

$$\frac{(6.45 \times 10^{-7}) \times (2 \times 10^{11})}{8.6 \times 10^{-3}}$$

$$1.5 \times 10^7$$