Calculating with standard form

1

Work out $(4 \times 10^2) \times (2 \times 10^6)$

Give your answer in standard form.

the numbers	the powers of 10
$4 \times 2 =$ 8	$10^2 \times 10^6 = 10^{\square}$

put them back together. Is it standard form?

$\square \times 10^{\square}$

Answer _____

2

Work out $(3 \times 10^5) \times (3 \times 10^4)$

Give your answer in standard form.

the numbers	the powers of 10
$3 \times 3 =$	$10^5 \times 10^4 = 10^{\square}$

put them back together. Is it standard form?

$\square \times 10^{\square}$

Answer _____

3

Work out $(6 \times 10^8) \div (3 \times 10^2)$

Give your answer in standard form.

the numbers	the powers of 10
$6 \div 3 =$	$10^8 \div 10^2 = 10^{\square}$

put them back together. Is it standard form?

$\square \times 10^{\square}$

Answer _____

4

Work out $(9 \times 10^7) \div (3 \times 10^4)$

Give your answer in standard form.

$9 \div 3 =$	$10^7 \div 10^4 = 10^{\square}$

$\square \times 10^{\square}$

Answer _____

5

Work out $(5 \times 10^4) \times (8 \times 10^3)$

Give your answer in standard form.

$5 \times 8 =$	$10^4 \times 10^3 = 10^{\square}$

$\square \times 10^{\square}$

Answer _____

6

Work out $(8 \times 10^{-2}) \div (4 \times 10^3)$

Give your answer in standard form.

Answer _____

7

A box holds 4×10^2 paper clips.
A shop has 3×10^3 boxes.
How many paper clips are there altogether? Give your answer in standard form.

Answer _____

8

Leo works out $(4 \times 10^2) \times (2 \times 10^7)$ and gets 8×10^{14}. Explain what Leo has done wrong. Then write the right answer.

Answer _____

Calculating with standard form *further practice*

9

Work out. Give your answer in standard form.

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

Answer _____

10

Work out. Give your answer in standard form.

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

Answer _____

11

A printer prints 4×10^2 pages a minute. How many pages does it print in 2×10^3 minutes?
Give your answer in standard form.

Answer _____

12

Find the missing number. Give it in standard form.

$$(3 \times 10^5) \times \square = 9 \times 10^{11}$$

Answer _____

13

Work out. Give your answer in standard form.

$$6 \times 10^3 + 4 \times 10^2$$

Answer _____

14

A hard drive holds 8×10^{12} bytes.
A film takes up 2×10^9 bytes.
How many films fit on the hard drive?
Give your answer as an ordinary number.

Answer _____

15

A lake holds 7×10^5 litres of water.
In a hot summer, 4×10^4 litres dry up.
How many litres are left?
Give your answer in standard form.

Answer _____

16

Ruby works out $(5 \times 10^6) \times (4 \times 10^3)$ and gets 20×10^9. She says this is in standard form. Is Ruby right? Explain.

Answer _____