



Standard Form

Question Paper 1

Level	IGCSE
Subject	Maths (0580)
Exam Board	Cambridge International Examinations (CIE)
Paper Type	Extended
Topic	Number
Sub-Topic	Standard Form
Booklet	Question Paper 1

Time Allowed: 60 minutes

Score: /50

Percentage: /100

Grade Boundaries:

A*	A	B	C	D	E	U
>85%	75%	60%	45%	35%	25%	<25%

1 Write 1.27×10^{-3} as an ordinary number.

.....[1]

2 Write 0.0000574 in standard form.

..... [1]

3 Write 270 000 in standard form.

Answer [1]

4 Write 53 400 000 in standard form.

Answer [1]

5 Write 1.7×10^{-4} as an ordinary number.

Answer [1]

6 (a) Write 2.8×10^2 as an ordinary number.

Answer(a) [1]

(b) Work out $2.5 \times 10^8 \times 2 \times 10^{-2}$.
Give your answer in standard form.

Answer(b) [2]

7 Work out $4 \times 10^{-5} \times 6 \times 10^{12}$.
Give your answer in standard form.

Answer [2]

8 $p = 4 \times 10^5$ $q = 5 \times 10^4$

Find, giving your answer in standard form,

(a) pq ,

Answer(a) [2]

(b) $\frac{q}{p}$.

Answer(b) [2]

6

9 Write the answer to the following calculations in standard form.

(a) $600 \div 8000$

Answer(a) [2]

(b) $10^8 - 7 \times 10^6$

Answer(b) [2]

10 Calculate $(4.3 \times 10^8) + (2.5 \times 10^7)$.

Give your answer in standard form.

Answer [2]

11 Calculate, giving your answers in standard form,

(a) $2 \times (5.5 \times 10^4)$,

Answer(a) [2]

(b) $(5.5 \times 10^4) - (5 \times 10^4)$.

Answer(b) [2]

12 The price of a ticket for a football match is \$124.

(a) Calculate the amount received when 76 500 tickets are sold.

Answer(a) \$ [1]

(b) Write your answer to **part (a)** in standard form.

Answer(b) \$ [1]

13 Work out $2(3 \times 10^8 - 4 \times 10^6)$, giving your answer in standard form.

Answer [2]

14 A hummingbird beats its wings 24 times per second.

(a) Calculate the number of times the hummingbird beats its wings in one hour.

Answer(a) [1]

(b) Write your answer to **part (a)** in standard form.

Answer(b) [1]

15 Solve the equation $4x + 6 \times 10^3 = 8 \times 10^4$.

Give your answer in standard form.

Answer $x =$ [3]

16 (a) Write 16 460 000 in standard form.

Answer(a) [1]

(b) Calculate $7.85 \div (2.366 \times 10^2)$, giving your answer in standard form.

Answer(b) [2]

17 Work out $\frac{240^2}{5 \times 10^6}$.

Give your answer in standard form.

Answer [2]

18 Calculate the value of $5(6 \times 10^3 + 400)$, giving your answer in standard form.

Answer [2]

19 Change 64 square metres into square millimetres.
Give your answer in standard form.

Answer mm² [2]

20

$\sqrt{23}$

48%

4.80

$\frac{53}{11}$

Write the numbers in order of size with the **largest** first.

Answer > > > [2]

21 1 second = 10^6 microseconds.

Change 3×10^{13} microseconds into minutes. Give your answer in standard form.

Answer min [2]

22 (a) There are 10^9 nanoseconds in 1 second.
Find the number of nanoseconds in 5 minutes, giving your answer in standard form.

Answer(a) [2]

(b) Solve the equation $5(x + 3 \times 10^6) = 4 \times 10^7$.

Answer(b) $x =$ [2]