

Chapter 1 Standard Form

Objective Questions

- 1 Round off 0.01761 correct to two significant figures.

A 0.017	C 0.018
B 0.0176	D 0.02

- 2 Round off 0.007803 correct to three significant figures.

A 0.008	C 0.00780
B 0.0078	D 0.007

- 3 Round off 72 519 correct to three significant figures.

A 725	C 72 500
B 72 000	D 73 000

- 4 Calculate the value of $8.27 \div 0.16 - 2.9617$ and round off your answer correct to two significant figures.

A 49	C 48.73
B 48	D 48.72

- 5 Calculate the value of $(8.76 - 5.917) \div 0.27$ and round off your answer correct to three significant figures.

A 10.529	C 10.5
B 10.530	D 11.0

- 6 Calculate the value of $0.21 \times 7.25 + 2.78 \div 25$ and round off your answer correct to two significant figures.

A 1.6	C 1.63
B 1.60	D 1.7

- 7 Calculate the value of $\frac{2.767 - 1.92}{1\ 000}$ and round off your answer correct to three significant figures.

A 0.000847	C 0.00847
B 0.001	D 0.085

- 8 Calculate the value of $\frac{6.215 + 12.76}{720 - 169}$ and round off your answer correct to two significant figures.

A 0.035	C 0.034
B 0.0344	D 0.030

- 9 $6.95 \times 10^{-3} =$
 A 0.695
 B 0.0695
 C 0.00695
 D 0.000695
- 10 $7.2 \times 10^6 + 93\,000 =$
 A 7.62×10^6
 B 7.29×10^6
 C 7.29×10^5
 D 7.3×10^4
- 11 Express 0.00000916 in standard form.
 A 9.16×10^6
 B 9.16×10^5
 C 9.16×10^{-5}
 D 9.16×10^{-6}
- 12 Express 8.25×10^{-3} as a single number.
 A 0.000825
 B 0.00083
 C 0.00825
 D 0.0083
- 13 $\frac{7.25 \times 10^{-3}}{(6 \times 10^3)^2} =$
 A 2.01×10^{-10}
 B 2×10^{-10}
 C 4×10^{-10}
 D 2×10^{10}
- 14 $5.627 \times 10^{10} - 8.1 \times 10^9 =$
 A 4.8×10^{10}
 B 4.8×10^9
 C 4.8×10^{-9}
 D 4.8×10^{-10}
- 15 $\frac{0.006}{80\,000} =$
 A 7.5×10^{-9}
 B 7.5×10^{-8}
 C 7.5×10^8
 D 7.5×10^9
- 16 Find the value of $7.3 \times 10^{-10} - 9.25 \times 10^{-11}$ and express your answer in standard form.
 A 6.4×10^{-10}
 B 6.4×10^{-9}
 C 6.375×10^9
 D 6.375×10^{10}
- 17 A circle has an area of 0.00627 cm^2 . Find the radius of the circle. (Use $\pi = 3.14$)
 A $4.5 \times 10^2 \text{ cm}$
 B $2.23 \times 10^2 \text{ cm}$
 C $2.23 \times 10^{-2} \text{ cm}$
 D $5.1 \times 10^8 \text{ cm}$
- 18 A square piece of land has an area of $7.27 \times 10^9 \text{ m}^2$. Find the length of the land.
 A $8.5 \times 10^5 \text{ m}$
 B $8.5 \times 10^4 \text{ m}$
 C $8.5 \times 10^{-4} \text{ m}$
 D $8.5 \times 10^{-5} \text{ m}$

19 The radius of the Earth is 6.4×10^6 m. Calculate the surface area of the Earth, in km^2 .
(Use $\pi = 3.14$)

- A 5.1×10^{10}
B 5.3×10^9

- C 5.3×10^8
D 5.1×10^8

20 The speed of light is 3×10^8 m s^{-1} . Calculate the distance travelled, in km, in one hour.

- A 1.08×10^{12}
B 1.08×10^{11}

- C 1.08×10^{10}
D 1.08×10^9

Subjective Questions

- 1 Round off 0.0786 correct to one significant figure.
- 2 Round off 0.007961 correct to two significant figures.
- 3 Round off 72 617 correct to two significant figures.
- 4 Round off 619 517 correct to three significant figures.
- 5 Calculate $(6.9 - 5.717) \div 300$. Give your answer correct to two significant figures.
- 6 Express 6 190 000 in standard form.
- 7 Express 0.0000657 in standard form.
- 8 Find the value of $\frac{2.4 \times 10^{-10}}{800}$ and express your answer in standard form.
- 9 Find the value of $\frac{7\,200}{8 \times 10^{16}}$ and express your answer in standard form.
- 10 Find the value of $(2.9 \times 10^7)^2 \times 6.8 \times 10^{-10}$ and express your answer in standard form.