



Scientific Notation Units - Advanced

1 Convert this number in units to scientific notation

6 milliamps

- | | |
|------------------------------|------------------------------|
| A 6.00×10^{-3} amps | B 6.00×10^0 amps |
| C 6.00×10^{-7} amps | D 6.00×10^{-6} amps |
| E 6.00×10^{-5} amps | F 6.00×10^{-1} amps |

2 Convert this scientific notation number to units

1.00×10^{-3} seconds

- | | |
|------------------|-----------------|
| A 1 milliseconds | B 1 kiloseconds |
| C 1 nanoseconds | D 1 seconds |
| E 1 picoseconds | F 1 megaseconds |

3 Convert this number in units to scientific notation

1.62 decimeters

- | | |
|--------------------------------|--------------------------------|
| A 1.62×10^{-2} meters | B 1.62×10^{-6} meters |
| C 1.62×10^1 meters | D 1.62×10^{-7} meters |
| E 1.62×10^{-1} meters | F 1.62×10^{-4} meters |

4 Convert this scientific notation number to units

6.81×10^{-3} meters

- | | |
|--------------------|--------------------|
| A 6.81 gigameters | B 6.81 millimeters |
| C 6.81 centimeters | D 6.81 meters |
| E 6.81 picometers | F 6.81 micrometers |

5 Convert this number in units to scientific notation

6 gigagrams

- | | |
|-------------------------------|-------------------------------|
| A 6.00×10^{12} grams | B 6.00×10^{14} grams |
| C 6.00×10^6 grams | D 6.00×10^{11} grams |
| E 6.00×10^9 grams | F 6.00×10^{13} grams |

6 Convert this number in units to scientific notation

20 decimeters

- | | |
|--------------------------------|--------------------------------|
| A 2.00×10^1 meters | B 2.00×10^0 meters |
| C 2.00×10^2 meters | D 2.00×10^{-5} meters |
| E 2.00×10^{-2} meters | F 2.00×10^4 meters |

7 Convert this scientific notation number to units

4.00×10^{12} bytes

- | | |
|---------------|---------------|
| A 4 picobytes | B 4 terabytes |
| C 4 megabytes | D 4 bytes |
| E 4 gigabytes | F 4 nanobytes |

8 Convert this number in units to scientific notation

0.0851 kiloamps

- | | |
|---------------------------|------------------------------|
| A 8.51×10^1 amps | B 8.51×10^0 amps |
| C 8.51×10^3 amps | D 8.51×10^{-1} amps |
| E 8.51×10^5 amps | F 8.51×10^{-2} amps |



Scientific Notation Units - Advanced

9 Convert this scientific notation number to units

$$2.97 \times 10^{-1} \text{ grams}$$

A 297 gigagrams B 297 picograms

C 297 micrograms D 297 milligrams

E 297 teragrams F 297 grams

10 Use the mnemonic 'Young Zoe Earns Pennies To Get Marbles' to remember the missing prefix

Young	yotta	10^{24}
Zoe	zetta	10^{21}
Earns	exa	10^{18}
Pennies	peta	10^{15}
To	tera	10^{12}
Get	?	10^9
Marbles	mega	10^6

A B C
exa mega giga

D E F
yotta peta zetta

11 Each prefix in the mnemonic 'Young Zoe Earns Pennies To Get Marbles' is 1000x smaller. What is the missing exponent?

Young	yotta	10^{24}
Zoe	zetta	10^{21}
Earns	exa	10^{18}
Pennies	peta	10^{15}
To	tera	10^{12}
Get	giga	?
Marbles	mega	10^6

A B C
 10^{12} 10^{21} 10^{24}

D E F
 10^6 10^{15} 10^9

12 Which unit is larger

'M' (ie Mg) or 'G' (ie Gg)

A
M

B
G

13 Which prefix is larger

'mega' or 'kilo'

A
kilo

B
mega

14 Which unit is larger

'P' (ie Pg) or 'T' (ie Tg)

A
P

B
T

15 Which prefix is larger

'peta' or 'exa'

A
exa

B
peta

16 Convert this number in units to scientific notation

3.15 teracandelas

A 3.15×10^{17} candelas

B 3.15×10^6 candelas

C 3.15×10^8 candelas

D 3.15×10^7 candelas

E 3.15×10^{16} candelas

F 3.15×10^{12} candelas

