

Scientific Notation and Unit Prefixes

Convert the following to scientific notation:

- 1) 45,700 _____
- 2) 0.009 _____
- 3) 23 _____
- 4) 0.9 _____
- 5) 24,212,000 _____
- 6) 0.000665 _____
- 7) 21.9 _____
- 8) 0.00332 _____
- 9) 321 _____
- 10) 0.119 _____
- 11) 1492 _____
- 12) 0.2713 _____
- 13) 314159 _____
- 14) 6022 _____
- 15) 0.12011 _____

Convert the following numbers in scientific notation to expanded form:

- 16) 3.825×10^3 _____
- 17) 6.3×10^4 _____
- 18) 2.3×10^{-2} _____
- 19) 4.44×10^{-6} _____

20) 7.121×10^9 _____

21) 1.2×10^{-1} _____

22) 1.8×10^2 _____

23) 8.1×10^{-4} _____

24) 6.7×10^5 _____

25) 3.4×10^7 _____

*There are 100 centimeters in a meter (or 1×10^{-2} meters in a cm) and
1000 millimeters in a meter (or 1×10^{-3} meters in a mm)*

There are 1000 meters in a kilometer (1×10^3 m in a km or 1×10^{-3} km in a m)

Make the following conversions:

1) 3.4 liters to milliliters

6) 45 meters to centimeters

2) 876 millimeters to meters

7) 11.7 grams to kilograms

3) 78,999 milligrams to grams

8) 0.0009 kiloliters to liters

4) 0.9 centigrams to grams

9) 44 centimeters to meters

5) 112 meters to millimeters

10) 277 kilograms to grams