

Write the following numbers in scientific notation.

1) 0.0063

2) 425.09

3) 0.000575

4) 6

Write the following numbers in standard form.

5) 2.34×10^3

6) 8.28×10^{-4}

7) 9.3×10^0

8) 2.7×10^{-1}

Solve each problem. Leave your answer in scientific notation.

9) $(2.7 \times 10^3) + (9.6 \times 10^2)$

10) $(3.8 \times 10^4)(8.6 \times 10^7)$

11)
$$\frac{(9.4 \times 10^{-3}) \times (2.7 \times 10^8)}{(2.8 \times 10^5) \times (6.3 \times 10^2)}$$

Convert the following.

12) 3,000,000 sec to years

13) 1.5 L to mL

14) 43120 cm to m

15) 32500 mg to kg

Solve for the unknown variable.

16) Solve $v = d/t$ for t when $d = 50$, $v = 30$.

17) Solve $d = \frac{1}{2}(v_f + v_i)t$ for v_f when $d = 100$, $t = 5$, $v_i = 10$.

18) Solve $KE = \frac{1}{2}mv^2$ for v when $KE = 400$, $m = 20$.

19) Solve $v_f^2 = v_i^2 + 2ad$ for v_i when $v_f = 150$, $a = 4$, $d = 250$.