

## Scientific notation

$$360 \rightarrow 3.6 \times 10^{\boxed{2}}$$

$$457\,000 \rightarrow 4.57 \times 10^{\boxed{5}}$$

$$0.\underbrace{0003}_{\text{}} \rightarrow 3.0 \times 10^{\boxed{-4}}$$

$$5.6 \times 10^5 = 560000$$

A handwritten equation showing the conversion of scientific notation to standard form. The number 5.6 is written in red, the multiplication sign is black, and the 10 is black with a purple 5 as a superscript. A black wavy line underlines the 5.6, and an arrow points from the end of the wavy line to the 5 in the exponent. The equals sign is red, and the standard form 560000 is written in black.

↑

$$5.6 \times 10^1 = 56$$

$$56 \times 10^1 = 560$$

$$560 \times 10^1 = 5600$$

$$5600 \times 10^1 = 56000$$

$$5.6 \times 10^5 = 560000$$

$$i\omega 3.25 \times 10^{-3} = 0.00325$$

$$1) \quad 7.6 \times 10^4 \\ = 76\,000$$

$$b) \quad 9.15 \times 10^{-3} \\ 0.00915$$

$$c) \quad 0.47 \times 10^7 \\ 47\,000\,000$$

$$d) \quad 0.19 \times 10^3 \\ 190$$

$$e) \quad 6 \times 10^{-1} \\ 0.6$$

$$f) \quad 25.6 \times 10^4 \\ 256\,000$$

$$2) a) \underbrace{495\,000}_{\text{green}} = 4.95 \times 10^{\boxed{5}}$$

$$b) \underbrace{672.5}_{\text{green}} = 6.725 \times 10^{\boxed{2}}$$

$$c) \underbrace{0.00082}_{\text{green}} = 8.2 \times 10^{\boxed{-4}}$$

$$d) \underbrace{0.000007}_{\text{green}} = 7 \times 10^{\boxed{-6}}$$

$$e) \underbrace{29.06}_{\text{green}} = 2.906 \times 10^{\boxed{1}}$$

$$3) \ a) \ 3,120,000,000 = 3.12 \times 10^9$$

$$b) \ 1,000,000 = 1 \times 10^6$$

$$c) \ 0.00000047 = 4.7 \times 10^{-7}$$

$$d) \ 12.04 = 1.204 \times 10^1$$

$$e) \ 74.500 = 7.45 \times 10^1$$

$$f) \ 0.0075 = 7.5 \times 10^{-3}$$

$$4) \quad \underline{298\,000} \text{ km} = 2.98 \times 10^5$$

$$b) \quad 0.000\,000\,08 = 8 \times 10^{-8}$$

$$c) \quad 0.0406 = 4.06 \times 10^{-2}$$



$$5) \quad 4.1 \times 10^6 = 41\,000\,000$$

$$b) \quad 5.31 \times 10^9 = 5\,310\,000\,000$$

$$c) \quad 9 \times 10^{-3} = 0.009$$

$$d) \quad 4.03 \times 10^{-5} =$$

0.0000403 Quiz next day