Standard Form

Literacy

Also called "Scientific Notation"

Exponent

4.21×10^{6}

Significand

Research

Write using Standard Form, the distance in metres from:

Earth to the sun

Earth to Voyager 1

Earth to Proxima Centauri

Memory

Learn these rules:

Significand is always between one and ten.

Exponent multiples or divides the significand by the required number of tens.

Skills

Convert these values into standard form:

a) 2000   b) 67000   c) 482.6

d) 0.003   e) 0.0000465   f) 0.01007

Convert these numbers into decimal values:

g) 6×10^{3} h) 4.8×10^{3} i) 2.93×10^{5}

j) 7×10^{-3} k) 8.56×10^{-5} l) 4.002×10^{2}

Stretch

Work out the following:

i) $(3 \times 10^{4}) \times (2 \times 10^{7})$

ii) $(4 \times 10^{3}) \times (8 \times 10^{6})$

iii) $(5 \times 10^{-5}) \times (7 \times 10^{3})$

iv) $(8 \times 10^{6}) \div (4 \times 10^{3})$

v) $(3 \times 10^{2}) \div (4 \times 10^{5})$

vi) $(5 \times 10^{-3}) \div (8 \times 10^{-5})$