

N5 Homework - Scientific Notation Solutions

- $8 \times 4.80 \times 10^8 = 3.84 \times 10^9$
- $7.1 \times 10^7 \div 300 = 2.4 \times 10^5$
- Time = Distance \div Speed
Time = $2.3 \times 10^8 \div 3.0 \times 10^5$
Time = 766.67 sec = 13 minutes.
- Distance = circumference = $2\pi r$
Distance = $2\pi \times 0.6 \times 10^7$
Speed = Distance \div Time
Time = $88 \times 24 = 2112$ hours
Speed = $2\pi \times 0.6 \times 10^7 \div 2112$
Speed = 17 849.95... = 18 000 kph (2 sf)
- $1.8 \times 10^3 \times 9.11 \times 10^{-31} = 1.6398 \times 10^{-27}$
 $= 1.6 \times 10^{-27}$ kg (2 sf)
- $5 \times 10^6 \times 9.46 \times 10^{12}$ km
 $= 4.73 \times 10^{19}$ km
- 1 year (not leap year) = $365 \times 24 \times 60 \times 60$
 $= 31536000$ seconds
Profit = $\pounds 3.2 \times 10^9 \div 31536000 = \pounds 101.47133...$
 $= \pounds 101$ per second.
- No. of days = 26 (J) + 31(J) + 31(A) + 20 (S)
 $= 108$
 $2.925 \times 10^7 \div 108 = 270\,833.333$
 $= 270\,833$ visitors per day
- $5.97 \times 10^{24} \div 2.2 \times 10^{30} \times 100$
 $= 0.0002713...$ %
 $= 2.71 \times 10^{-4}$ % (3 sf)