

1.10 HOMEWORK HANDOUT: SCIENTIFIC NOTATION

PART A

Write each number in standard format.	Write each number in scientific notation.
a) $2.6651 \times 10^{-7} =$	k) $81700 =$
b) $2.04 \times 10^4 =$	l) $5999500 =$
c) $9.32 \times 10^3 =$	m) $0.92786 =$
d) $2.2646 \times 10^5 =$	n) $0.0061881 =$
e) $7.698 \times 10^1 =$	o) $585000000 =$
f) $2.865 \times 10^{-4} =$	p) $0.0000000658140 =$
g) $3.323 \times 10^{-6} =$	q) $0.0000000607360 =$
h) $7.237 \times 10^2 =$	r) $0.01191 =$
i) $3.884 \times 10^{-5} =$	s) $71350000 =$
j) $7.36 \times 10^9 =$	t) $2.29 =$

Answers:

a)0.00000026651 b)20400 c)9320 d)226460 e)76.98 f)0.0002865 g)0.0000033230 h)723.7 i)0.00003884 j)7360000000
k) 8.17×10^4 l) 5.9995×10^6 m) 9.2786×10^1 n) 6.1881×10^{-3} o) 5.85×10^8 p) 6.58140×10^{-8} q) 6.0736×10^{-9} r) 1.191×10^{-2} s) 7.135×10^7
t) 2.29×10^0

PART B

1. Convert to Scientific notation.

a) 0.567×10^5

b) 12.8×10^{-15}

c) 0.2×10^{-4}

d) 58×10^{12}

2. Without changing notations indicate which one is larger.

a) 0.001 , 1×10^{-4}

b) 3×10^4 , 2.5×10^5

c) 0.1×10^{-5} , 0.01×10^{-4}

d) 4.2×10^0 , 4222×10^{-3}

e) -0.5×10^{-2} , 5×10^{-120}

3. In question 2 which numbers are not written in proper scientific notation?

Answers:

1. a) 5.67×10^4 b) 1.28×10^{-14} c) 2×10^{-5} d) 5.8×10^{13} 2. a) 0.001 b) 2.5×10^5 c) same d) 4222×10^{-3} e) 5×10^{-120}
3. 0.001, 0.1×10^{-5} , 0.01×10^{-4} , 4222×10^{-3} , -0.5×10^{-120}