

HOMEWORK 9 Term 2 Sheet3 advanced

eg.  $6 \times 10^2 = 6 \cdot 00 = 600$   
 $8.5 \times 10^{-3} = 0.0085$   
 $500 = 500.0 = 5 \times 10^2$   
 $0.000024 = 2.4 \times 10^{-5}$

1 Evaluate.

- |                        |                      |                      |                        |                        |
|------------------------|----------------------|----------------------|------------------------|------------------------|
| a $6 \times 10^1$      | b $6 \times 10^2$    | c $6 \times 10^3$    | d $6 \times 10^{-2}$   | e $4 \times 10^{-1}$   |
| f $4 \times 10^{-4}$   | g $8 \times 10^4$    | h $8 \times 10^{-3}$ | i $2.5 \times 10^2$    | j $2.5 \times 10^5$    |
| k $2.5 \times 10^{-2}$ | l $3.6 \times 10^1$  | m $9.3 \times 10^3$  | n $9.3 \times 10^{-2}$ | o $8.1 \times 10^{-1}$ |
| p $7 \times 10^6$      | q $3.04 \times 10^3$ | r $3.04 \times 10^2$ | s $5.4 \times 10^{-2}$ | t $8.32 \times 10^5$   |

2 Write in scientific notation.

- |           |         |         |        |          |
|-----------|---------|---------|--------|----------|
| a 430     | b 4300  | c 43000 | d 900  | e 8200   |
| f 30000   | g 0.6   | h 0.006 | i 0.27 | j 0.04   |
| k 0.0008  | l 5000  | m 68    | n 30   | o 0.075  |
| p 0.00032 | q 20000 | r 0.02  | s 1750 | t 123000 |

Write in binary	9	21	29	35
Write in decimal	1001	10110	111101	1101101

Calculate – write the answer in binary and decimal:

$\begin{array}{r} 101 \\ + 11 \\ \hline \hline \end{array}$	$\begin{array}{r} 1101 \\ - 110 \\ \hline \hline \end{array}$	$\begin{array}{r} 10101 \\ \times 111 \\ \hline \hline \hline \end{array}$
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\* Hexadecimal is another computer language  
Use your netbook calculator:

$1E84$  (hex) = (decimal)       $5C2F9$  (hex) = (decimal)