

### Identifying Significant Figures

1. Determine the number of sig figs in the following examples:

- |                      |   |                        |    |
|----------------------|---|------------------------|----|
| a) 409.10            | 5 | n) 16.08               | 4  |
| b) 305               | 3 | o) 203 000             | 3  |
| c) 0.25              | 2 | p) 16.73               | 4  |
| d) 0.4020            | 4 | q) $8.90 \times 10^5$  | 3  |
| e) 0.00056030        | 5 | r) 300 000 000.0       | 10 |
| f) 371 883           | 6 | s) 0.0500              | 3  |
| g) 308 000           | 3 | t) 2007                | 4  |
| h) 85.00             | 4 | u) $3.895 \times 10^4$ | 4  |
| i) $2.0 \times 10^2$ | 2 | v) 0.9                 | 1  |
| j) 59.98             | 4 | w) 140                 | 2  |
| k) 1 030.00          | 6 | x) 16.000              | 5  |
| l) 20                | 1 | y) $1.45\bar{0}$       | 4  |
| m) 0.05              | 1 | z) 20 003              | 5  |

2. Convert the following numbers into numbers containing the required # of sig figs.

original number	# sig figs required	new number
403.67	4	403.7
23.13	3	23.1
16.0072	2	16
124.55	3	125
0.046	1	0.05
14.909	2	15
358	1	400
$4.0 \times 10^3$	3	$4.00 \times 10^3$
167442	3	167 000
13.68	3	13.7
200	3	$20\bar{0}$ or $2.00 \times 10^2$
14.5	2	15
16.023	4	16.02
14 000	1	10 000