Multiplication and Division with Significant Figures

In operations involving multiplication, division and trigonometric functions, the answer must contain the same number of **significant figures** as the number with the fewest significant figures in the computation.

Ex:

2.60 ÷ 8.4 = $0.30952381 = 0.31$

0.0025 x 4227 x 3.0 = $31.7025 = 32$

101 x 6 = $606 = 6 \times 10^2$

$(4.156 \times 10^3) \times (1.75 \times 10^2) = 7.273 \times 10^5 = 7.27 \times 10^5$

$\tan 60.5^0 = 1.76749016..$

$= 1.77$

Addition and subtraction: The result of an addition or subtraction must contain the same number of **decimal places** (not sig figs) as the number with the fewest decimal places in the calculation.

Ex:

12 + 3.6 $= 15.6 = 16$

4.75 + 9.1 $= 13.85 = 13.9$

26.88 - 12.379 $= 14.501 = 14.50$