Significant Figure Rules:

Rule for counting significant figures:

a) Integers (numbers with out any decimal places) have an infinite number of significant figures.
b) Absolute/definition numbers have an infinite number of significant figures.
c) For real numbers:
    i) if there are no numbers to the right of the decimal point, only the non-zero digits to the left are significant.
    ii) if there is only a zero to the left of the decimal point, start counting sig. fig.s from the first *nonzero* decimal place.
    iii) if there are digits on either side of the decimal place, they are all significant.

NOTE: Zeroes to the right of the last nonzero decimal place *ARE* significant!

Rule for adding/subtracting significant figures:

The sum/difference can have no more decimal places than the component with the LEAST number of decimal places.

Rule for multiplying/dividing significant figures:

The product/quotient can have no more significant digits that the component with the LEAST number of significant figures.

Rule for rounding numbers:

a) If the first non-significant digit is >5, add 1 to the last sig. fig. (round up).
b) If the first non-significant digit is <5, add 0 to the last sig. fig. (round down).
c) If the first non-significant digit is =5:
    i) if last sig. fig. is even, round down.
    ii) if last sig. fig. is odd, round up.