Correction for Relative & Absolute Error

For root finding problems, if question says find the root up to five correct decimal places or up to five significant figures both holds the same meaning. For these such problems, the relative error & absolute error should be determined by

Absolute Error= $\frac{1}{2} * 10^{-N}$

Relative Error=
$$\frac{1}{2} * 10^{2-N} \%$$

For five significant figures or correct up to five decimal places the stopping criteria for iteration will be

 $€_{s} = 0.5 * 10^{2-5}\% = 0.0005\%$