$\frac{1}{4}$

1 the error of the result

1.1 model error

the error comes from the difference when we make model. The math model come from the practial, having some difference.

1.2 the measuring error

we get the parameter by measuring

1.3 the truncatation error

The numerial method we use in the model is an approximate method, so it have some error with the practial model.

1.4 round error

2 absolute error and relative error

2.1 absolute error

give a real number, its approximate is x^* , $x-x^*$ is the value between the approximate value and real value. we give it a name

$$c^2 = a^2 + b^2$$
 (1)

ootr