whence we derive this practical rule: To obtain the resultant of the elimination of x in this case, it is sufficient to equate to zero the product of the coefficients of x and x', and add to them the term independent of x.

32. The Case of Indetermination.—Just as the resultant

$$ab = 0$$

corresponds to the case when the equation is possible, so the equality

$$a + b = 0$$

corresponds to the case of *absolute indetermination.* For in this case the equation both of whose coefficients are zero $(a = 0)$, $(b = 0)$, is reduced to an identity $(0 = 0)$, and therefore is "identically" verified, whatever the value of x may be; it does not determine the value of x at all, since the double inclusion

$$b < x < a'$$

then becomes

$$0 < x < 1,$$

which does not limit in any way the variability of x. In this case we say that the equation is *indeterminate.*

We shall reach the same conclusion if we observe that $(a + b)$ is the superior limit of the function $ax + bx'$ and that, if this limit is 0, the function is necessarily zero for all values of x,

$$(ax + bx' < a + b)\ (a + b = 0) < (ax + bx' = 0).$$

Special Case.—When the equation contains a term independent of x,

$$ax + bx' + c = 0,$$

the condition of absolute indetermination takes the form

$$a + b + c = 0.$$

For

$$ax + bx' + c = (a + c)x + (b + c)x',$$

$$(a + c) + (b + c) = a + b + c = 0.$$