J. Raphson
Analysis Aequationum universalis, London, 2nd ed., 1697, pp. 8 and 20.

PROP. II
Let it be proposed that ba - aaa = c

Let there be chosen any quantity whatever (g) less than (a). I say that (g) obtained closer and closer (by our method), being always greater than its predecessor, but certainly less than (a), will therefore converge to the true value.

By this hypothesis, $g + z = a$. So,

$$bg - ggg + b - 3gg \times z - 3gzz - zzz = ba - aaa = c$$

Therefore $\overline{b - 3gg} \times z - 3gzz - zzz = c + ggg - bg$

Therefore $+z - \dfrac{3gzz + zzz}{b - 3gg} = \dfrac{c + ggg - bg}{b - 3gg} = +x$.

From the convergence Theorems, we have $+z = +x + \dfrac{3gzz + zzz}{b - 3gg}$,

and adding (g) to both parts, produces

$$g + z = a = g + x + \frac{3gzz + zzz}{b - 3gg}.$$

But this new (g) = $g + x$ is greater than the preceding, by the quantity (x), and less however than (a), by the quantity $\dfrac{3gzz + zzz}{b - 3gg}$, part of its total. Q.E.D.[...]

PROBLEM XII
Trisection of the angle

Given the Radius of a Circle = r and the Chord of an arc = c, what is the Chord of the Third part of the arc?

The equation $3rra - aaa = crr$ will give the Chord of an arc of 20 degrees, the Third part of sixty.

In the case $c = r = 10.000$ and the equation being $300a - aaa = 1000$, (namely) $ba - aaa = c$, then according to the preceding theorem:

g = 3
c + ggg − bg = + 127
b − 3gg = + 273) + 127.0 (+.4 = x
3·
+ .4
g = 3·4
c + ggg − bg = + 19.304
b − 3gg = 265.32) + 19.3040 (+.072 = x
3.4
+.072
g = 3.472
c + ggg − bg = +.254210048
b − 3gg = 263.835648) +.254210048o (+.0009636 = x
3.472
+.0009636
g = 3.4729636
c + ggg − bg = −.00001231000208 99.
b − 3gg = 263.8155715) −.00001231000208 99 (−.000000466 1393 = x
3.4729636.
−.000000046661393
a = 3.472963553333 8607