
A simple and unique approach
in solving polynomial equations

$$\text{-- root 'r'} = \frac{K}{Z} + (n - 1) \frac{K}{Z} R$$

$$\text{op-root 'r'} = \frac{K}{Z} + (n - 1) \frac{K}{Z} R$$

New And Simple Methods
Of
Solving Polynomial Equations

(ALL REAL ROOTS)

(10 new theorems and many new definitions.)

PART -1 (M)

(Appendix)

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This is an appendix
to
'NEW AND SIMPLE METHODS
OF SOLVING POLYNOMIAL
EQUATIONS'
(ALL REAL ROOTS)
PART - 1(M)

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Solving non-integer coefficient equation.

$$1. X^3 + \frac{15}{2}X^2 + \frac{86}{9}X + \frac{10}{3} = 0 \quad \text{equation ----- 1.}$$

$$X^3 + 7.5X^2 + 9.5555X + 3.3333 = 0 \quad \text{equation ----- 2.}$$

Assume, using my methods, we get the following answers.

The op-roots are

$$r_1 = 0.6666, r_2 = 0.8333, \text{ and } r_3 = 6.$$

Remove all integer and irrational roots in the original equation (1) if any.

$$\begin{array}{r|rrrr}
 6 & 1 & \frac{15}{2} & \frac{86}{9} & \frac{10}{3} \\
 & 0 & 6 & 9 & \frac{10}{3} \\
 \hline
 & 1 & \frac{3}{2} & \frac{5}{9} & 0
 \end{array}$$

$$X^2 + \frac{3}{2}X + \frac{5}{9} = 0$$

Make a fraction where the numerator is F and the denominator is the big denominator of the coefficients. = $\frac{F}{9}$.

$$r_1 = 0.6666$$

$$r_1 = \frac{F}{9} = 0.6666$$

$$F = 5.9994$$

$$r_1 = \frac{6}{9} = \frac{2}{3},$$

$$r_2 = \frac{F}{9} = 0.8333,$$

$$F = 7.4999$$

$$r_1 = \frac{7.5}{9} = \frac{15}{18} = \frac{5}{6},$$

The answers are verified and found correct.

The op-roots are

$$r_1 = \frac{2}{3}, r_2 = \frac{5}{6}, \text{ and } r_3 = 6.$$

The roots are

$$r_1 = -\left(\frac{2}{3}\right), r_2 = -\left(\frac{5}{6}\right), \text{ and } r_3 = -6.$$

Some more examples with details, in **PART2**.
