



Exact Solutions > Algebraic Equations and Systems of Algebraic Equations > Algebraic Equations > Modified Reciprocal Equation

6.  $ax^4 + bx^3 + cx^2 - bx + a = 0 \quad (a \neq 0).$

*Modified reciprocal equation.*

The substitution

$$y = x - \frac{1}{x}$$

leads to a quadratic equation of the form

$$ay^2 + by + 2a + c = 0.$$

Modified Reciprocal Equation