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

*Reciprocal algebraic equation.*

The substitution

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

leads to a quadratic equation of the form

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

### Reference

**Encyclopedia of Mathematics, Vol. 1** [in Russian], Sovetskaya Entsiklopediya, Moscow, pp. 740–741, 1977.

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