

8.  $F(x, y(x), y(x^a)) = 0$ .

The transformation  $\xi = \ln x$ ,  $u(\xi) = y(x)$  leads to the equation

$$F(e^{\xi}, u(\xi), u(a\xi)) = 0.$$

See equation 3 in the current subsection.

## Reference

**Polyanin, A. D. and Manzhirov, A. V.,** *Handbook of Integral Equations: Exact Solutions (Supplement. Some Functional Equations)* [in Russian], Faktorial, Moscow, 1998.

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