



26.  $y(x) - y\left(\frac{a-x}{1+bx}\right) = 0.$

Solution:

$$y(x) = \Phi\left(x, \frac{a-x}{1+bx}\right),$$

where  $\Phi(x, z) = \Phi(z, x)$  is any symmetric function of two arguments.

### Reference

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