



**30.**  $y(x) - cy\left(\frac{a-x}{1+bx}\right) = f(x), \quad c \neq \pm 1.$

Solution:

$$y(x) = \frac{1}{1-c^2} f(x) + \frac{c}{1-c^2} f\left(\frac{a-x}{1+bx}\right).$$

### Reference

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