



28.  $y'_x = f(y + ax^n + b) - anx^{n-1}$ .

The substitution  $u = y + ax^n + b$  leads to a separable equation:  $u'_x = f(u)$ .

### Reference

**Polyanin, A. D. and Zaitsev, V. F.**, *Handbook of Exact Solutions for Ordinary Differential Equations, 2nd Edition*, Chapman & Hall/CRC, Boca Raton, 2003.