



26. $x^2 y''_{xx} + x y'_x = f(y)$.

The substitution $x = \pm e^t$ leads to an autonomous equation of the form 3.1: $y''_{tt} = f(y)$.

Reference

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