

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

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.

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http://eqworld.ipmnet.ru/en/solutions/ode/ode0326.pdf