



20.  $(ax^2 + b)y''_{xx} + axy'_x + cy = 0.$

The substitution  $z = \int \frac{dx}{\sqrt{ax^2 + b}}$  leads to a constant coefficient linear equation:  $y''_{zz} + cy = 0.$

### Reference

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