

21.
$$y_{xx}'' = f(y)y_x'$$
.

Solution:

$$\int \frac{dy}{F(y) + C_1} = C_2 + x, \qquad F(y) = \int f(y) \, dy,$$

where C_1 and C_2 are arbitrary constants.

Reference

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

Copyright © 2004 Andrei D. Polyanin

http://eqworld.ipmnet.ru/en/solutions/ode/ode0321.pdf