



33. $[x^n f(y) + xg(y)]y'_x = h(y).$

This is a Bernoulli equation with respect to $x = x(y)$ (see equation 1.4).

Reference

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