



43. $y''_{xx} - (f^2 + f'_x)y = 0, \quad f = f(x).$

Particular solution: $y_0 = \exp\left(\int f dx\right).$

Solution:

$$y = C_1 y_0 + C_2 y_0 \int \frac{dx}{y_0^2},$$

where C_1 and C_2 are arbitrary constants.

References

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