



Exact Solutions > Linear Partial Differential Equations > Higher-Order Partial Differential Equations

5. Higher-Order Partial Differential Equations

5.1. Equation of Transverse Vibration of Elastic Rods $\frac{\partial^2 w}{\partial t^2} + a^2 \frac{\partial^4 w}{\partial x^4} = 0$

5.2. Equation of Transverse Vibration of Elastic Rods of the Form $\frac{\partial^2 w}{\partial t^2} + a^2 \frac{\partial^4 w}{\partial x^4} = \Phi(x, t)$

5.3. Biharmonic Equation $\Delta \Delta w = 0$

5.4. Nonhomogeneous Biharmonic Equation $\Delta \Delta w = \Phi(x, y)$

The EqWorld website presents extensive information on solutions to various classes of ordinary differential equations, partial differential equations, integral equations, functional equations, and other mathematical equations.

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<http://eqworld.ipmnet.ru/en/solutions/lpde/lpdetoc5.pdf>