

## 1 Формулы Latex:

$$u(x, t) = \sum_{n=1}^{\infty} (a_n \cos(\omega_n t) + b_n \sin(\omega_n t)) \sin\left(\frac{\pi n l}{x}\right) \quad (1)$$

$$E_n = M h^2 \frac{l^2 a^2}{\pi^2 n^2 c^2 (l - c)^2} \sin^2\left(\frac{\pi n c}{l}\right) \quad (2)$$

$$u(x, t) = A e^{\pm \sqrt{\frac{\omega}{2a^2}} x} \cos\left(\pm \sqrt{\frac{\omega}{2a^2}} x + \omega t\right) \quad (3)$$

$$|I^2| \leq \frac{1}{2\sqrt{\pi}} \int_{x_1}^{x^2} \frac{1}{\sqrt{a^2 t}} e^{-\frac{(x-\xi)^2}{4a^2 t}} |\phi(\xi) - \phi(\xi_0)| \quad (4)$$

$$\lim_{\epsilon \rightarrow 0} \iiint_{T-K_e} \left(-\frac{1}{R} \Delta u\right) dr \quad (5)$$

## 2 Код Latex:

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\begin{equation}
u( x,t ) = \displaystyle\sum_{n=1}^{\infty} \{ (a_n \cos( \omega_n
t)+b_n \sin( \omega_n t)) \sin(\frac{\pi n}{l} x )\}
\end{equation}
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\begin{equation}
E_n = M h^2 \frac{ l^2 a^2 }{ \pi^2 n^2 c^2 (l-c)^2 } \sin^2( \frac{\pi
n c}{l} )
\end{equation}
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\begin{equation}
u( x,t ) = A e^{\pm \sqrt{\frac{\omega}{2a^2}} x } \cos( \pm \sqrt{\frac{\omega}{2a^2}} x + \omega t )
\end{equation}
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\begin{equation}
| I^2 | \leq \frac{1}{2 \sqrt{\pi}} \int\limits_{x_1}^{x^2} \frac{1}{\sqrt{a^2 t}} e^{-\frac{(x-\xi)^2}{4a^2 t}} | \phi(\xi)-\phi(\xi_0) |
\end{equation}
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\begin{equation}
\lim_{\epsilon \rightarrow 0} \iiint\limits_{T-K_e} \left( -\frac{1}{R} \right)
\Delta u \Big) dr
\end{equation}
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