

Absolutní konvergence Newtonova integrálu

$$a, b \in \mathbb{R}$$

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| 1. $\int_0^1 x^a dx$ | KA $\Leftrightarrow a > -1$. | neboli | |
| 2. $\int_1^{+\infty} x^a dx$ | KA $\Leftrightarrow a < -1$. | 3. $\int_0^1 \frac{1}{x^a} dx$ | KA $\Leftrightarrow a < 1$. |
| | | 4. $\int_1^{+\infty} \frac{1}{x^a} dx$ | KA $\Leftrightarrow a > 1$. |

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| 5. $\int_0^{1/e} x^a \ln x ^b dx$ | KA $\Leftrightarrow (a > -1, b \in \mathbb{R}$ nebo $a = -1, b < -1)$ |
| 6. $\int_e^{+\infty} x^a \ln x ^b dx$ | KA $\Leftrightarrow (a < -1, b \in \mathbb{R}$ nebo $a = -1, b < -1)$ |
| 7. $\int_0^{+\infty} x^a e^{bx} dx$ | KA $\Leftrightarrow a > -1$ a $b < 0$ |
| 8. $\int_1^{+\infty} x^a e^{bx} dx$ | KA $\Leftrightarrow a \in \mathbb{R}$ a $b < 0$ nebo $b = 0$ a $a < -1$. |

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| 9. $\int_0^1 \frac{\sin x}{x^a} dx$ | KA $\Leftrightarrow a < 2$. |
| 10. $\int_0^1 \frac{\cos x}{x^a} dx$ | KA $\Leftrightarrow a < 1$. |
| 11. $\int_1^{+\infty} \frac{\sin x}{x^a} dx$ | KA $\Leftrightarrow a > 1$ |
| 12. $\int_1^{+\infty} \frac{\cos x}{x^a} dx$ | KA $\Leftrightarrow a > 1$, |