

Интегралы, содержащие $\operatorname{th} x$ и $\operatorname{cth} x$

$$691.01. \quad \int \operatorname{th} x \, dx = \ln \operatorname{ch} x. \quad [\text{См. } 687.11.]$$

$$691.02. \quad \int \operatorname{th}^2 x \, dx = x - \operatorname{th} x. \quad [\text{См. } 687.22.]$$

$$691.03. \quad \int \operatorname{th}^3 x \, dx = -\frac{\operatorname{th}^2 x}{2} + \ln \operatorname{ch} x. \quad [\text{См. } 687.33.]$$

$$691.09. \quad \int \operatorname{th}^p x \, dx = -\frac{\operatorname{th}^{p-1} x}{p-1} + \int \operatorname{th}^{p-2} x \, dx \quad [p \neq 1].$$

$$692.01. \quad \int \operatorname{cth} x \, dx = \ln |\operatorname{sh} x|. \quad [\text{См. } 688.11.]$$

$$692.02. \quad \int \operatorname{cth}^2 x \, dx = x - \operatorname{cth} x. \quad [\text{См. } 688.22.]$$

$$692.03. \quad \int \operatorname{cth}^3 x \, dx = -\frac{\operatorname{cth}^2 x}{2} + \ln |\operatorname{sh} x|. \quad [\text{См. } 688.33.]$$

$$692.09. \quad \int \operatorname{cth}^p x \, dx = -\frac{\operatorname{cth}^{p-1} x}{p-1} + \int \operatorname{cth}^{p-2} x \, dx \quad [p \neq 1].$$