Rubi 3 Test Suite Results

Indefinite Integration Problems Involving Exponentials

Unable to integrate:

$$\left\{\frac{\operatorname{Cos}[x] + \operatorname{Sin}[x]}{e^{-x} + \operatorname{Sin}[x]}, x, -5, 5\right\}$$

 $Log[1 + e^{x} Sin[x]]$

$$x - Int \left[\frac{1}{1 + e^{x} Sin[x]}, x \right] - Int \left[\frac{Cot[x]}{1 + e^{x} Sin[x]}, x \right] + Log[Sin[x]]$$

Unable to integrate:

$$\left\{ e^{\mathrm{Sin}[\mathbf{x}]} \; \mathrm{Sec}[\mathbf{x}]^{2} \; \left(\mathbf{x} \; \mathrm{Cos}[\mathbf{x}]^{3} - \mathrm{Sin}[\mathbf{x}] \right), \; \mathbf{x}, \; -7, \; 7 \right\}$$

$$e^{Sin[x]}$$
 (-1 + x Cos[x]) Sec[x]

$$\operatorname{Int}\left[\operatorname{e}^{\operatorname{Sin}[x]} \, x \, \operatorname{Cos}\left[x\right], \, x\right] - \operatorname{Subst}\left[\operatorname{Int}\left[\frac{\frac{2\,x}{\operatorname{e}^{\,1+x^2}}}{\left(-1+x\right)^2}, \, x\right], \, x, \, \operatorname{Tan}\left[\frac{x}{2}\right]\right] + \operatorname{Subst}\left[\operatorname{Int}\left[\frac{\frac{2\,x}{\operatorname{e}^{\,1+x^2}}}{\left(1+x\right)^2}, \, x\right], \, x, \, \operatorname{Tan}\left[\frac{x}{2}\right]\right]$$

Unable to integrate:

$$\{e^{x^x} x^{2x} (1 + Log[x]), x, -3, 3\}$$

$$e^{x^x}$$
 $(-1 + x^x)$

$$\text{Int}\left[\,e^{x^{x}}\;x^{2\,x}\,,\;x\,\right]\,+\,\text{Subst}\left[\,\text{Int}\left[\,e^{\,(e^{x})^{\,e^{x}}+x}\,\left(\,e^{x}\right)^{\,2\,e^{x}}\;x\,,\;x\,\right],\;x\,,\;\text{Log}\left[\,x\,\right]\,\right]$$

Unable to integrate:

$$\left\{ \mathbf{x}^{-2-\frac{1}{x}} \, \left(1 - \text{Log} \left[\mathbf{x} \right] \right) \, \text{, } \mathbf{x} \, \text{, } -3 \, \text{, } 3 \right\}$$

$$-x_{-1/2}$$

$$\text{Int}\left[\left.\mathbf{x}^{-2-\frac{1}{x}},\;\mathbf{x}\right.\right]-\text{Subst}\left[\left.\text{Int}\left[\left.\left(e^{x}\right)\right.^{-1-e^{-x}}\;\mathbf{x},\;\mathbf{x}\right.\right],\;\mathbf{x},\;\text{Log}\left[\mathbf{x}\right]\right.\right]$$