

Pensieve Header: Printing the Exact Solution..

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SetDirectory["C:\\drorbn\\AcademicPensieve\\2012-05\\beta5.1"];
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```
<< betaCalculus.m
```

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Join[
```

```
  {V → B[ω[c1, c2],
```

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    α[c1, c2] t[1] h[1] + β[c1, c2] t[1] h[2] + γ[c1, c2] t[2] h[1] + δ[c1, c2] t[2] h[2]],
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  C → B[κ[c1], 0]},
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  Get["ExactSolution-120528.m"][[3]]
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] // ColumnForm
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$$V \rightarrow \begin{pmatrix} \omega[c_1, c_2] & h[1] & h[2] \\ t[1] & \alpha[c_1, c_2] & \beta[c_1, c_2] \\ t[2] & \gamma[c_1, c_2] & \delta[c_1, c_2] \end{pmatrix}$$

$$C \rightarrow \begin{pmatrix} \kappa[c_1] \\ t[1] \end{pmatrix}$$

$$\alpha[c_1, c_2] \rightarrow - \frac{2 e^{c_1 + \frac{c_2}{2}} c_2 \left( -2 \operatorname{Sinh}\left[\frac{c_1}{2}\right] \operatorname{Sinh}\left[\frac{1}{2}(c_1 + c_2)\right] + \sqrt{2} \sqrt{\frac{\operatorname{Sinh}\left[\frac{c_1}{2}\right]}{c_1}} c_1 \sqrt{\frac{\operatorname{Sinh}\left[\frac{c_2}{2}\right]}{c_2}} \sqrt{\frac{\operatorname{Sinh}\left[\frac{1}{2}(c_1 + c_2)\right]}{c_1 + c_2}} (c_1 + c_2) \right)}{(-1 + e^{c_1}) (-1 + e^{c_1 + c_2}) c_1 (c_1 + c_2)}$$

$$\beta[c_1, c_2] \rightarrow \frac{e^{\frac{c_1}{2} + c_2} (-1 + e^{c_1}) c_2 \sqrt{\frac{\operatorname{Sinh}\left[\frac{1}{2}(c_1 + c_2)\right]}{c_1 + c_2}} + c_1 \left( -\sqrt{2} (-1 + e^{c_1 + c_2}) \sqrt{\frac{\operatorname{Sinh}\left[\frac{c_1}{2}\right]}{c_1}} \sqrt{\frac{\operatorname{Sinh}\left[\frac{c_2}{2}\right]}{c_2}} + 2 e^{c_1 + c_2} \operatorname{Sinh}\left[\frac{c_1}{2}\right] \sqrt{\frac{\operatorname{Sinh}\left[\frac{1}{2}(c_1 + c_2)\right]}{c_1 + c_2}} \right)}{\sqrt{2} (-1 + e^{c_1 + c_2}) \sqrt{\frac{\operatorname{Sinh}\left[\frac{c_1}{2}\right]}{c_1}} c_1 \sqrt{\frac{\operatorname{Sinh}\left[\frac{c_2}{2}\right]}{c_2}} (c_1 + c_2)}$$

$$\gamma[c_1, c_2] \rightarrow \frac{2 e^{c_1 + \frac{c_2}{2}} \left( -2 \operatorname{Sinh}\left[\frac{c_1}{2}\right] \operatorname{Sinh}\left[\frac{1}{2}(c_1 + c_2)\right] + \sqrt{2} \sqrt{\frac{\operatorname{Sinh}\left[\frac{c_1}{2}\right]}{c_1}} c_1 \sqrt{\frac{\operatorname{Sinh}\left[\frac{c_2}{2}\right]}{c_2}} \sqrt{\frac{\operatorname{Sinh}\left[\frac{1}{2}(c_1 + c_2)\right]}{c_1 + c_2}} (c_1 + c_2) \right)}{(-1 + e^{c_1}) (-1 + e^{c_1 + c_2}) (c_1 + c_2)}$$

$$\delta[c_1, c_2] \rightarrow \frac{\frac{c_1}{e^{\frac{c_2}{2}}} - \frac{\sqrt{2} e^{c_1 + c_2} \sqrt{\frac{\operatorname{Sinh}\left[\frac{c_1}{2}\right]}{c_1}} c_1 \sqrt{\frac{\operatorname{Sinh}\left[\frac{1}{2}(c_1 + c_2)\right]}{c_1 + c_2}}}{(-1 + e^{c_1 + c_2}) \sqrt{\frac{\operatorname{Sinh}\left[\frac{c_2}{2}\right]}{c_2}} c_2} - \frac{1}{c_1 + c_2}}$$

$$\omega[c_1, c_2] \rightarrow \frac{2^{1/4} \left( \frac{\operatorname{Sinh}\left[\frac{c_1}{2}\right]}{c_1} \right)^{1/4} \left( \frac{\operatorname{Sinh}\left[\frac{c_2}{2}\right]}{c_2} \right)^{1/4}}{\left( \frac{\operatorname{Sinh}\left[\frac{1}{2}(c_1 + c_2)\right]}{c_1 + c_2} \right)^{1/4}}$$

$$\kappa[c_1] \rightarrow \frac{1}{2^{1/4} \left( \frac{\operatorname{Sinh}\left[\frac{c_1}{2}\right]}{c_1} \right)^{1/4}}$$