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[ > restart;
[ > with(linalg):
Warning, the protected names norm and trace have been redefined and unprotected
[ > A:=matrix([[3,2],[-2,-1]]);

$$A := \begin{bmatrix} 3 & 2 \\ -2 & -1 \end{bmatrix}$$

[ > eigenvects(A);
[1, 2, {[ -1, 1]}]
[ > Phi:=matrix([[-exp(t), -t*exp(t)-(1/2)*exp(t)], [exp(t), t*exp(t)]]);

$$\Phi := \begin{bmatrix} -e^t & -t e^t - \frac{1}{2} e^t \\ e^t & t e^t \end{bmatrix}$$

[ > inverse(Phi);

$$\begin{bmatrix} \frac{2t}{e^t} & \frac{2t+1}{e^t} \\ -\frac{2}{e^t} & -\frac{2}{e^t} \end{bmatrix}$$

[ > int((6*t+1)*exp(-2*t),t);

$$-3 e^{(-2t)} t - 2 e^{(-2t)}$$

[ >

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