

1 p4.9

$$15\sqrt{2}e^{-2t}\sin\left(\sqrt{2}t\right) \tag{1}$$

2 p3.30

$$\frac{73786976294838203125\delta(t)}{73786976294838206464}-\frac{9223372036854775390625e^{-1000t}}{4611686018427387904}+\frac{1152921504606846923828125te^{-1000t}}{1152921504606846976} \tag{2}$$