SUPERPOSITION METHOD

Patterns for finding Y(t), the particular solution

Pattern	Possible form for Y(t)
any constant	A
$3t+8$	$At + B$
$4t^2-5$	$At^2 + Bt + c$
t^3+2t-3	$At^3 + Bt^2 + Ct + D$
$\sin 3t$	$A \cos 3t + B \sin 3t$
$\cos 3t$	$A \cos 3t + B \sin 3t$
e^{2t}	$A e^{2t}$
$(3t +4)e^{2t}$	$(At + B) e^{2t}$
$t^2 e^{2t}$	$(At^2 + Bt + C) e^{2t}$
$e^{2t}\sin 3t$	$Ae^{2t} \cos 3t + Be^{2t} \sin 3t$
$4t^2\sin 3t$	$(At^2 +Bt + C)\cos 3t + (Et^2 + Ft + G)\sin 3t$
$te^{2t} \cos 3t$	$(At + B)e^{2t}\cos 3t + (Ct + D)e^{2t}\sin 3t$