

Trial solutions for the method of undetermined coefficients

	<u>Form of $g(x)$</u>	<u>Guess for particular solution</u>
1.	1 (any constant)	A
2.	$5x + 7$	$Ax + B$
3.	$3x^2 - 2$	$Ax^2 + Bx + C$
4.	$\sin 4x$	$A \cos 4x + B \sin 4x$
5.	$\cos 4x$	$A \cos 4x + B \sin 4x$
6.	e^{5x}	Ae^{5x}
7.	$(9x - 2)e^{5x}$	$(Ax + B)e^{5x}$
8.	x^2e^{5x}	$(Ax^2 + Bx + C)e^{5x}$
9.	$e^{3x} \sin 4x$	$Ae^{3x} \cos 4x + Be^{3x} \sin 4x$
10.	$5x^2 \sin 4x$	$(Ax^2 + Bx + C) \cos 4x + (E^2 + Fx + G) \sin 4x$
11.	$xe^{3x} \cos 4x$	$(Ax + B)e^{3x} \cos 4x + (Cx + E)e^{3x} \sin 4x$
12.	$(5x + 7) + \sin 4x$	$(Ax + B) + (C \cos 4x + D \sin 4x)$