שיטת השוואת המקדמים - טבלה

(מציאת פתרון פרטי למשוואה ליניארית, לא הומוגנית, מסדר שני, עם מקדמים קבועים)

TABLE 4.1 UNDETERMINED COEFFICIENTS FOR $L[y](x) = g(x)$

Type	$g(x)$	$y_p(x)$
(I) $p_n(x) = a_n x^n + \cdots + a_1 x + a_0$		$x^s P_n(x) = x^s\{A_n x^n + \cdots + A_1 x + A_0\}^{\dagger}$
(II) $ae^{\alpha x}$		$x^s A e^{\alpha x}$
(III) $a \cos \beta x + b \sin \beta x$		$x^s \{A \cos \beta x + B \sin \beta x\}$
(IV) $p_n(x)e^{\alpha x}$		$x^s P_n(x)e^{\alpha x}$
(V) $p_n(x)\cos \beta x + q_m(x)\sin \beta x$, where $q_m(x) = b_m x^m + \cdots + b_1 x + b_0$		$x^s \{P_N(x)\cos \beta x + Q_N(x)\sin \beta x\}$, where $Q_N(x) = B_N x^N + \cdots + B_1 x + B_0$ and $N = \max(n, m)$
(VI) $ae^{\alpha x} \cos \beta x + be^{\alpha x} \sin \beta x$		$x^s \{Ae^{\alpha x} \cos \beta x + Be^{\alpha x} \sin \beta x\}$
(VII) $p_n(x)e^{\alpha x} \cos \beta x + q_m(x)e^{\alpha x} \sin \beta x$		$x^s e^{\alpha x}\{P_N(x)\cos \beta x + Q_N(x)\sin \beta x\}$, where $N = \max(n, m)$

The nonnegative integer s is chosen to be the smallest integer so that no term in the particular solution $y_p(x)$ is a solution to the corresponding homogeneous equation $L[y](x) = 0$.

† $P_n(x)$ must include all its terms even if $p_n(x)$ has some terms that are zero.