Match-Up | Sums and Products of Maclaurin Series

Match up the function with the first four non-zero terms of its Maclaurin series.

1	$e^x \cos x$
2	$e^x \sin x$
3	$e^x + \sin x$
4	$e^x - \cos x$
5	$\sin x + \cos x$

6	$\sin x + \ln(1+x)$
7	$e^x - \ln(1+x)$
8	$e^{-x} \sin(2x)$
9	$e^{3x} \cos(-x)$
10	$e^{-4x} \ln(1+2x)$

A	$1 + 2x + \frac{x^2}{2} + \frac{x^4}{24} + ..$
B	$2x - \frac{x^2}{2} + \frac{x^3}{6} - \frac{x^4}{4} + ..$
C	$2x - 2x^2 - \frac{5x^3}{3} + \frac{7x^4}{3} + ..$
D	$x + x^2 + \frac{x^3}{3} + \frac{x^5}{120} + ..$
E	$1 + 3x + 4x^2 + 3x^3 + ..$

F	$1 + x - \frac{x^2}{2} - \frac{x^3}{6} + ..$
G	$2x - 10x^2 + \frac{80x^3}{3} - 54x^4 + ..$
H	$1 + x - \frac{x^3}{3} - \frac{x^4}{6} + ..$
I	$1 + x^2 - \frac{x^3}{6} + \frac{7x^4}{24} - ..$
J	$x + x^2 + \frac{x^3}{6} + \frac{x^5}{120} + ..$

1	2	3	4	5	6	7	8	9	10