Crack the Code | Integrating using Partial Fractions

A	$\int \frac{6x^2 - 2x}{(x+3)(1+x^2)}\,dx = \boxed{6}\ln\lvert x + \boxed{3}\rvert - \boxed{2}\arctan(x) + c$
B	$\int \frac{4x^2 + 9x + 4}{x + x^3}\,dx = \boxed{4}\ln\lvert x\rvert + \boxed{9}\arctan(x) + c$
C	$\int \frac{5x^2 + 10x}{(x-2)(x^2+4)}\,dx = \boxed{5}\ln\lvert x - \boxed{2}\rvert + \boxed{5}\arctan\left(\frac{x}{\boxed{2}}\right) + c$
D	$\int \frac{x^2 - 12x + 9}{x^3 + 9x}\,dx = \boxed{1}\ln\lvert x\rvert - \boxed{4}\arctan\left(\frac{x}{\boxed{3}}\right) + c$
E	$\int \frac{5x^2 + 5x + 9}{(x^2+4)(x+3)}\,dx = \boxed{3}\ln\lvert x + \boxed{3}\rvert + \ln\lvert x^2 + \boxed{4}\rvert - \frac{1}{\boxed{2}}\arctan\left(\frac{x}{\boxed{2}}\right) + c$
F	$\int \frac{10x^2 - 23x + 15}{(x-3)(x^2+9)}\,dx = \boxed{2}\ln\lvert x - 3\rvert + \boxed{4}\ln\lvert x^2 + \boxed{9}\rvert + \frac{1}{\boxed{3}}\arctan\left(\frac{x}{3}\right) + c$
G	$\int \frac{20x^2 + 16x + 3}{(x+2)(4x^2+1)}\,dx = \ln\left\lvert (x + \boxed{2})^{\boxed{3}}(\boxed{4}\,x^2 + 1)\right\rvert + c$
H	$\int \frac{67x - 92}{(x+4)(3x^2+12)}\,dx = \boxed{3}\ln\left\lvert \frac{3x^2 + \boxed{12}}{(x+4)^2}\right\rvert - \frac{\boxed{5}}{\boxed{6}}\arctan\left(\frac{x}{\boxed{2}}\right) + c$

To get the three-digit code, add together the numbers in the boxes.

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