Silly Sammy Seal (Integral Evaluation)

Problems:

$\int_0^1 e^x\,dx =$ NO MATCH (answer = $e-1$)

$\int_0^{\frac{\pi}{4}} \cos^2 x\,dx = \frac{\pi}{8}+\frac{1}{4}$

$\int \sec 2x\,dx =$ NO MATCH (answer = $\frac{1}{2}\ln\left|\sec 2x+\tan 2x\right|+C$)

$\int \frac{dx}{\sqrt{4-x^2}} =$ NO MATCH (answer = $Sin^{-1}\left(\frac{x}{2}\right)+C$)

$\int_0^2 \frac{2xdx}{x^2+2} = \ln(3)$

$\int \frac{dx}{x\ln x} =$ NO MATCH (answer = $\ln\left(\ln\left|x\right|\right)+C$)

$\int \cos^3 x\,dx =$ NO MATCH (answer = $\sin x-\frac{1}{3}\sin^3 x+C$)

$\int \tan x\,dx =$ NO MATCH (answer = $\ln\left|\sec x\right|+C$)

$\int\left(\sqrt{x}+\frac{1}{\sqrt{x}}\right)^2 dx = \frac{x^2}{2}+2x+\ln(x)+C$

$\int_{-4}^4 \left(x^2-\sin^3 x\right)dx = \frac{128}{3}$

$\int \frac{\mathrm{dx}}{\mathrm{x}^2-2x+2} =$ NO MATCH (answer = $Tan^{-1}\left(x-1\right)+C$)

$\int_0^{\ln 3} e^{2x}\,dx = 4$

$\int_0^1 x\sqrt{4-x^2}\,dx =$ NO MATCH (answer = $\frac{8}{3}-\sqrt{3}$)

$\int_{-1}^3 \left|x\right|dx = 5$

$\int \frac{x\,dx}{1+x^4} = \frac{1}{2}Tan^{-1}x^2+C$

$\int_0^{101\pi} |\sin x|\,dx =$ NO MATCH (answer = 202)

Silly Sammie Seal turns into Serious Sally Swan: