

Integrate

a) $\int x \tan^{-1} x \, dx$

b) $\int x \sqrt{1-x^4} \, dx$

c) $\int \frac{\sec^2 x \, dx}{\sqrt{1-\tan x}}$

d) $\int \frac{x^3 + x + 1}{x(x^2 + 1)} \, dx$

e) $\int \frac{dx}{x^2 + 6x + 10}$

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c) $\int \frac{\csc^2 x \, dx}{\sqrt{1-\cot x}}$

d) $\int \frac{x^3 + x^2 + 1}{x(x^2 + 1)} \, dx$

e) $\int \frac{dx}{x^2 + 4x + 5}$