

Vendredi 18 Mars  
n° 7 p 274.

$$\begin{aligned} a) f(x) &= \frac{x^2 - x + 1}{x^3} = \frac{x^2}{x^3} - \frac{x}{x^3} + \frac{1}{x^3} \\ &= \frac{1}{x} - \frac{1}{x^2} + \frac{1}{x^3} \end{aligned}$$

$$F(x) = \ln x + \frac{1}{x} - \frac{1}{x^2} + k$$

$$\begin{aligned} b) f(x) &= \frac{x^4 + 7x^2 - 1}{x^2} = \frac{x^4}{x^2} + \frac{7x^2}{x^2} - \frac{1}{x^2} \\ &= x^2 + 7 - \frac{1}{x^2} \end{aligned}$$

$$F(x) = \frac{1}{3}x^3 + 7x + \frac{1}{x} + k$$

$$c) f(x) = \frac{1}{3\sqrt{x}} + x - 1$$

$$F(x) = \frac{2}{3}\sqrt{x} + \frac{1}{2}x^2 - x + k$$

$$d) f(x) = e^{-x} + \frac{5}{x}$$

$$F(x) = -e^{-x} + 5 \ln x + k$$

Non une primitive de  
 $x \rightarrow \frac{1}{x^3}$  n'est  
pas  $x \rightarrow -\frac{4}{x^4}$