$$\int_{-2}^{1} \left(\frac{3x^2+2x-1}{3}\right) dx \longrightarrow \int \frac{3x^2}{3} + \int \frac{2x}{3} - \int \frac{1}{3} = \frac{x^3}{3} + \frac{x^2}{3} - \frac{x}{3} + c$$

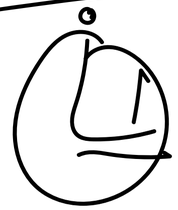
$$\hookrightarrow \frac{x^2}{2} \cdot \frac{2}{3} = \frac{2x^2}{6} = \frac{x^2}{3}$$

$$\left[\frac{x^3}{3} + \frac{x^2}{3} - \frac{x}{3}\right]_{-2}^{1}$$

$$\left[\frac{\overbrace{-8+2+2}^{2}}{3}\right] + \left[\frac{\overbrace{1+1-1}^{1}}{3}\right]$$

2P

$$\frac{5}{3} + 1 = \frac{7}{3}$$



2P

$$\int_{0}^{\frac{\pi}{2}} (\sin x + \cos x)\,dx \qquad -\cos + \sin$$

$$\left[\overbrace{-\cos 0 + \sin 0}^{0}\right] - \left[\overbrace{-\cos\frac{\pi}{2} + \sin\frac{\pi}{2}}^{\pi}\right] = [-0+1] - [-1+0] = +1-(-1) = 2$$

$y' - 3x^2 + 2x - 1 = 0 \qquad y(0) = 3$

$\int y' = \int 3x^2 - 2x + 1 \longrightarrow 3\int x^2 - 2\int x + \int 1 \rightarrow \frac{3x^3}{3} - \frac{2x^2}{2} + x = y$

$y = \overbrace{x^3 - x^2 + x}^{0} + C \qquad 3 = C$