22. $\frac{dy}{dx} = 5 + \frac{x^2}{(5x^3+1)^2}$ $(0,1)$

$y = \int \frac{dy}{dx}$

$= \int \left(5 + \frac{x^2}{(5x^3+1)^2}\right) dx$

$= \int 5\,dx + \int \frac{x^2}{(5x^3+1)^2}\,dx$

$u = 5x^3+1 \quad du = 15x^2\,dx$

$y = 5x + \frac{1}{15}\int \frac{15x^2}{(5x^3+1)^2}\,dx$

$y = 5x + \frac{1}{15}\int \frac{1}{u^2}\,du$

$y = 5x + \frac{1}{15}\int u^{-2}\,du$

$y = 5x + \frac{1}{15}\cdot\frac{u^{-2+1}}{-2+1} + C$

$y = 5x + \frac{1}{15}\cdot\frac{u^{-1}}{-1} + C$

$y = 5x - \frac{1}{15u^1} + C$

$\boxed{y = 5x - \frac{1}{15(5x^3+1)} + C}$

$(0,1)$
$x=0 \quad y=1$

$1 = 5(0) - \frac{1}{15(5(0)^3+1)} + C$

$1 = \frac{-1}{15} + C$

$1 + \frac{1}{15} = C$

$\frac{16}{15} = C$

$\boxed{y = 5x - \frac{1}{15(5x^3+1)} + \frac{16}{15}}$