

$$y' = 5x^4 - 2x + 7, y(0) = -1$$

Integrate both sides:

$$y = \int (5x^4 - 2x + 7) dx = \\ x^5 - x^2 + 7x + C$$

Apply initial condition:

$$y(0) = -1 = (0)^5 - (0)^2 + 7(0) + C \\ \rightarrow -1 = C$$

$$\text{so, } \boxed{y = x^5 - x^2 + 7x - 1}$$