My mega amazing problem!

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Find the solution of the ODE

$$y'=3$$

that fulfills y(0) = 1.

Solution: Generic solution is:

$$y = 3x + C.$$

Solution to the initial value problem is:

$$y = 3x + 1.$$

You can also solve the problem with MatLab:

```
\begin{array}{l} tspan \, = \, \begin{bmatrix} 0 & 5 \end{bmatrix}; \\ y0 \, = \, 1; \\ [\, t\,,y \,] \, = \, ode45\,(@(\,t\,,y) \, \ 3\,, \ tspan\,, \ y0\,); \\ plot\,(\,t\,, \ y\,); \end{array}
```

This is shown on the next figure:

