Practice 01

(Discussion with your classmates is welcome!! however write up answers yourself)

$$y'' - 8y' + 16 = 3\cos 4t - \sin 5t$$

please find $y(t)$ matches this Equ. and the following initial condition

$$y(0) = 10$$
$$y'(0) = 10$$

hint : $y = y_p + y_{homo}$

$$\begin{cases} P(D)\, y_p = 3\cos 4t - \sin 5t \\ P(D)\, y_{homo} = 0 \end{cases}$$

$\{$ y matches the initial condition