

Math 321

Mr. }
Dr. } Waterman
Prof. }

Gregg

- ① Name
- ② Hometown
- ③ Major
- ④ Last math - what, when, where
- ⑤ a) Do you have a class at 11 on Tuesdays?
b) " " " " " " 1 " " ?
- ⑥ Write a couple sentences about yourself.

$$\begin{array}{lll} y = x^5 & y = e^{5t} & y = \sin 5t \\ y' = 5x^4 & y' = 5e^{5t} & y' = 5\cos 5t \\ \frac{dy}{dx} = 5x^4 & [e^u]' = [e^u](u)' & \end{array}$$

$$(uv)' = uv' + vu'$$

$$e^{3t} \sin 2t$$

$$\textcircled{1} \text{ a) } 6 \cos 3x$$

$$\text{b) } y' = -2e^{-0.5t}$$

$$\text{c) } 2t + 5$$

$$\text{d) } -4.42 \sin(1.3t - 0.9)$$

$$\text{e) } e^{-3t} - 3te^{-3t}$$

$$\text{f) } 12e^{-2t} \cos(3t+5) - 8e^{-2t} \sin(3t+5)$$

$$y = t$$

$$\frac{dy}{dt} \leftarrow \text{change in } y$$
$$\frac{dy}{dt} \leftarrow \text{change in } t$$

② a) Seconds time

b) in/sec velocity

c) At 3 seconds the mass is moving upward at 1.87 in/sec