## Quiz \#10

1. (2 points) Evaluate the limit

$$
\lim _{x \rightarrow 0} \frac{e^{2 x}-1-2 x}{x^{2}}
$$

2. (5 points) Find the second degree Taylor polynomial of $f(x)=\tan x$ at $x=\frac{\pi}{4}$.
3. (3 points) Sketch the curve

$$
x(t)=\sin t, y(t)=\cos t, \frac{\pi}{2} \leq t \leq \frac{3 \pi}{2}
$$

Also indicate in which direction the curve is traversed.

