Name: _____   Date: _____
AP Calc   Ms. Loughran

Do Now:

Evaluate each.

1. $\dfrac{d}{dx}\left[\displaystyle\int_{4}^{x} t^{2}\,dt\right] =$

Thoughts on a shortcut to evaluate this?

2. $\dfrac{d}{dx}\left[\displaystyle\int_{0}^{\cos x} t\,dt\right] =$

Does your conjecture still hold?

3. $\dfrac{d}{dx}\left[\displaystyle\int_{1}^{\tan x} e^{t}\,dt\right] =$