

Function to Integrate:

$$y'(t) := \frac{1}{1+t^2}$$

The [**Prime'**] key is above the [**Tab**] key.

Indefinite Integral:

$$y(t) := \int y'(t) dt \rightarrow \text{atan}(t) \quad \boxed{+ C}$$

Definite Integral:

$$A := \int_2^4 y'(t) dt \rightarrow \text{atan}(4) - \text{atan}(2)$$

$$A = 0.219$$

Definite integral as a function, using initial condition:

$$t_0 := 2 \quad y_0 := 1$$

$$y(t) := y_0 + \int_{t_0}^t y'(\tau) d\tau \rightarrow 1 + \text{atan}(t) - \text{atan}(2)$$

<- τ is t [**Ctrl G**]

$$t := t_0, t_0 + 1 .. 100$$

