

TVE 11-08-05

$$\textcircled{62} v; A'(t) = \frac{2}{\sqrt{1+4t}}$$

$$v(t) = \underline{\underline{\frac{2}{5} \frac{m}{\text{sec}}}}$$

$$a; A''(t) = \frac{-4}{(1+4t)^{\frac{3}{2}}}$$

$$a(t=6) = \underline{\underline{\frac{-4}{125} \frac{m}{\text{sec}^2}}}}$$

$$\frac{d(\sin x)}{dx} @ x = \frac{\pi}{3}$$

51 2
52 9
55 2
61 50

~~$$\frac{d(\sin \frac{\pi}{3})}{dx}$$~~

SAD

MATHEMATICS

$$\begin{aligned} & 6 \cos(2x-3) \sin(2x-3) \\ &= 3 \cdot \underline{2 \cdot \sin(2x-3) \cdot \cos(2x-3)} \\ &= 3 \cdot \sin 2(2x-3) \\ &= \underline{\underline{3 \cdot \sin(4x-6)}} \end{aligned}$$

TRIG
FUN
GIFT
RESURRECTED!

$$(61) \quad y(x) = 37 \sin \left[\frac{2\pi}{365} (x - 101) \right] + 25$$

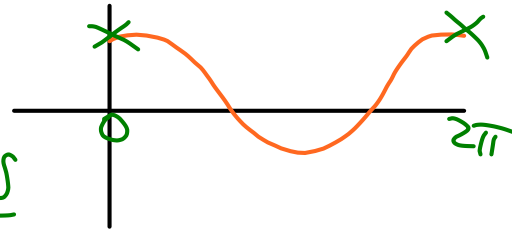
$$y'(x) = 37 \cos \left[\frac{2\pi}{365} (x - 101) \right] \cdot \frac{2\pi}{365}$$

MAX?

WHEN
 $x - 101 = 0$

$\rightarrow x = 101$ DAYS

J	31	9)	= APR 11
F	28		
M	31		
90			



$$b) \quad y'(x=101) = 1.637 \frac{\text{DEG-F}}{\text{DAY}}$$

$$= \frac{74\pi}{365}$$

$$(53) \quad y = \sin\left(\frac{x}{2}\right)$$

LRGST POSSIBLE SLOPE OF

$$y = \sin\left(\frac{1}{2}x\right)$$

$$y' = \cos\left(\frac{1}{2}x\right) \cdot \frac{1}{2}$$

