Math-242 Chapter 1 video Name: \_\_\_\_\_

If x= f (t) is used to describe a particles position along a straight line then v (t) = F' (t) =  $\frac{dx}{dt}$  is the velocity of the particle.

Acceleration is a (t) =

Newton's law of motion states F=ma

So F=?

V= at + 
$$V_{\mathrm{0}}$$

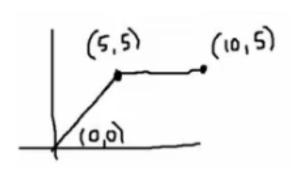
$$V = \frac{dx}{dt}$$
 & what is x equal to?

$$\frac{dx}{dt} = x\sqrt{x^2 + 9}$$
; y (-4) = 0 & what is f(x) equal to?

Math-242 Chapter 1 video Name: \_\_\_\_\_

a (t) = 2t + 1,  $V_0$  = -7,  $X_0$  = 4 & what is v equal to?

$$x = \int t^2 + t - 7 dt$$
 & what is x equal to?



Graph of Velocity. Find graph of the resulting position Function.