

Sheet #106

NAME: _____ Per: _____

PARAMETRIC GRAPHS ON TI

① 2nd MEM(+) 722 (Reset Defaults)
 (FOR PLAIN TI-83: 522)

① MODE DEGREES, PAR(AMETRIC)

WINDOW
 TMIN 0
 TMAX 2
 TSTEP 0.03
 XMIN 0
 XMAX 12
 XSC1 1
 YMIN -1
 YMAX 4
 YSC1 1

Projectile $V_0 = 10 \text{ m/sec}$

$\theta_0 = 30^\circ$

Y= CLEAR EQUATIONS. USA X,T,θ,n BUTTON

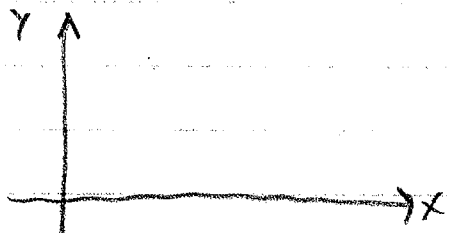
$X_{1T} = 10 \cos(30)T$

$Y_{1T} = 10 \sin(30)T - 5T^2$

$X_{2T} = T$

$Y_{2T} = \tan(30)T$ } INITIAL VECTOR DIRECTION (ANGLE = 30)

a) then GRAPH/SWITCH



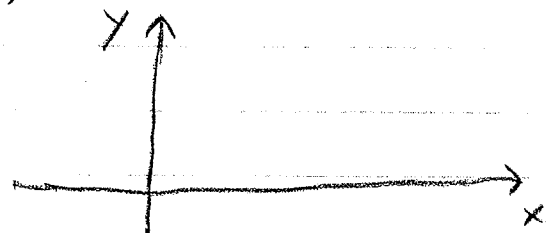
- b, WHAT IS SHAPE CALLED?
- g, WHAT ANGLE GIVES LARGEST RANGE?
 (BIGGEST X INTERCEPT) TRIAL & ERROR!

② MODE RADIANS
 Y= CLEAR EQUATIONS

$X = -2 + 4T$

$Y = 1 + T$

ZOOM 6 WINDOW TMIN = -6



b, WHAT IS FUNCTION CALLED?

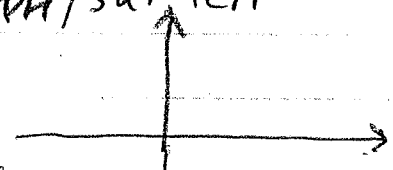
③ $X = 5 \cos(T)$

$Y = 5 \sin(T)$

ZOOM 6 STANDARD

ZOOM 5 SQUARE

a, GRAPH/SKETCH



b, WHAT IS SHAPE CALLED?

g, WHAT IS "S"?

④ $X = \cos(2T)$

$Y = T$

ZOOM 7 TRN TMIN = -6

a, SKETCH



<Settings may NOT work: Ask for help.>

b, WHAT IS RELATION CALLED?

(WHAT IS THIS A GRAPH OF?)

IMPORTANT!

⑤ 2nd MEM(+) 722

[PLAIN TI-83: 522]

(Reset Defaults)