

Pg 425 TANKER A AND TANKER B

$$x_{1T} = 18t$$

$$x_{2T} = 22t$$

$$y_{1T} = 1$$

$$y_{2T} = 2$$

DOMAIN  $0 \leq x \leq 900$ RANGE  $-1 \leq y \leq 3$  ← DEPENDS ON  $y$   
YOU PICK

WINDOW:

T MIN	0
T MAX	50
T step	0.1

X MIN	0
X MAX	900
X scl	100

Y MIN	-1
Y MAX	3
Y scl	1

INVESTIGATION: SIMULATING MOTION

1a)  $900/22 = 40.\overline{90}$  Hours

b)  $900 - 18(40.\overline{90}) = 163.6$  miles

736.2 mi EAST OF Corpus Christi

c)  $r_0t = \text{dist}$       $r_1t - r_2t = \text{dist}_{\text{diff}}$

$$22t - 18t = 82 \quad t = 20.5$$

d)  $x_{3t} = 22t - 18t$

$$y_{3t} = 1.5$$

$$x = y^2$$

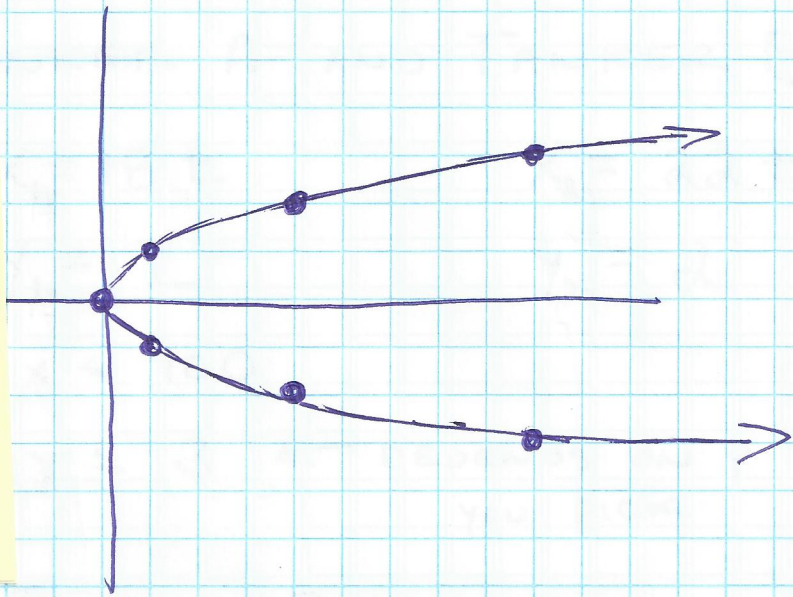
$$x = t^2$$

$$y = t$$

$$t = -6, 6, 1$$

$$x = -4, 20, 1$$

$$y = -6, 6, 1$$



$$x = t^2 - 4$$



$$y = t/2$$

$$2y = t$$

Pg 433  
Example  
A

$$x = (2y)^2 - 4$$

$$x = 4y^2 - 4$$

$$4y^2 = x + 4$$

$$y^2 = \frac{x+4}{4}$$

$$y = \pm \sqrt{\frac{x+4}{4}}$$

$$x+4 = t^2$$

$$\pm \sqrt{x+4} = t$$

$$y = \pm \frac{\sqrt{x+4}}{2}$$