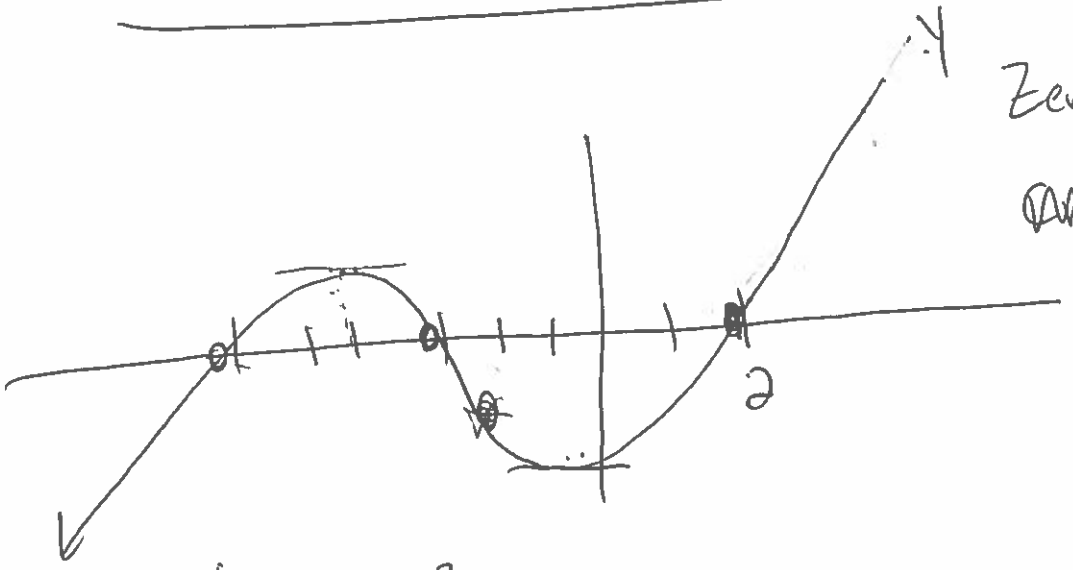
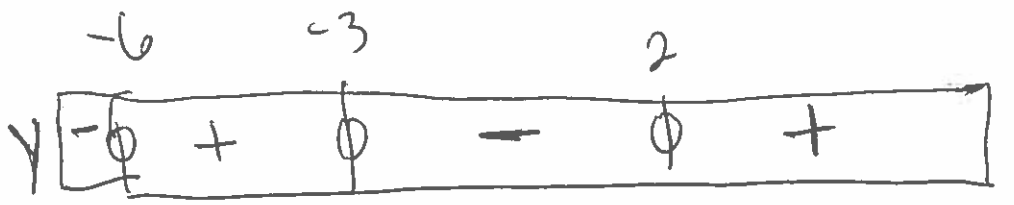
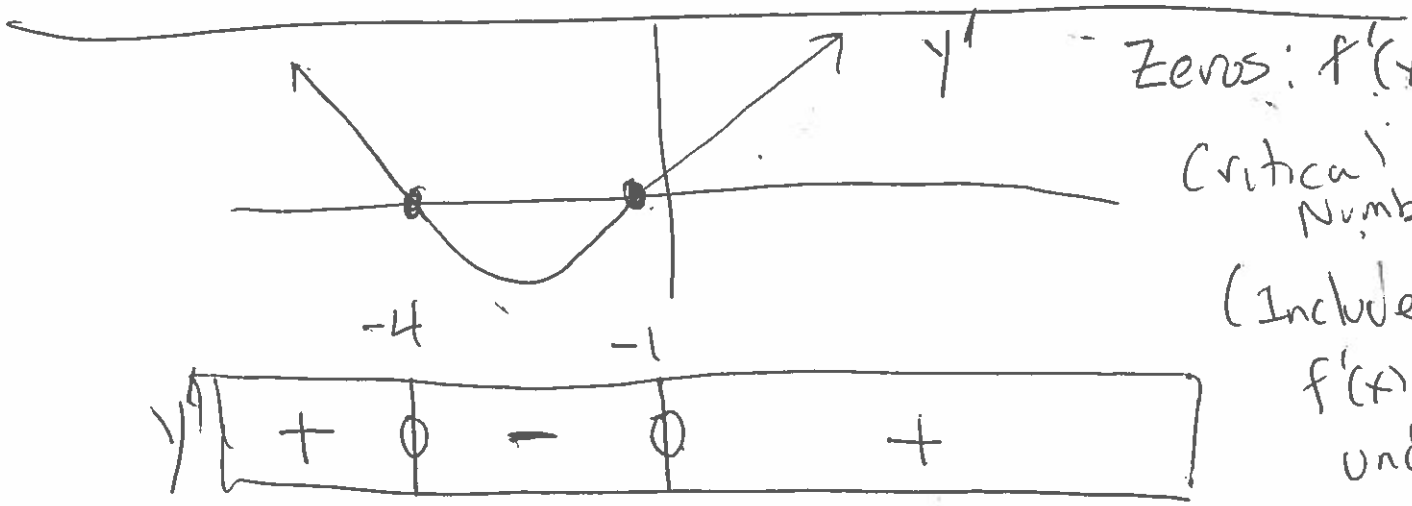
Analysis of Functions



Zeros: f(x)
and x-intercept

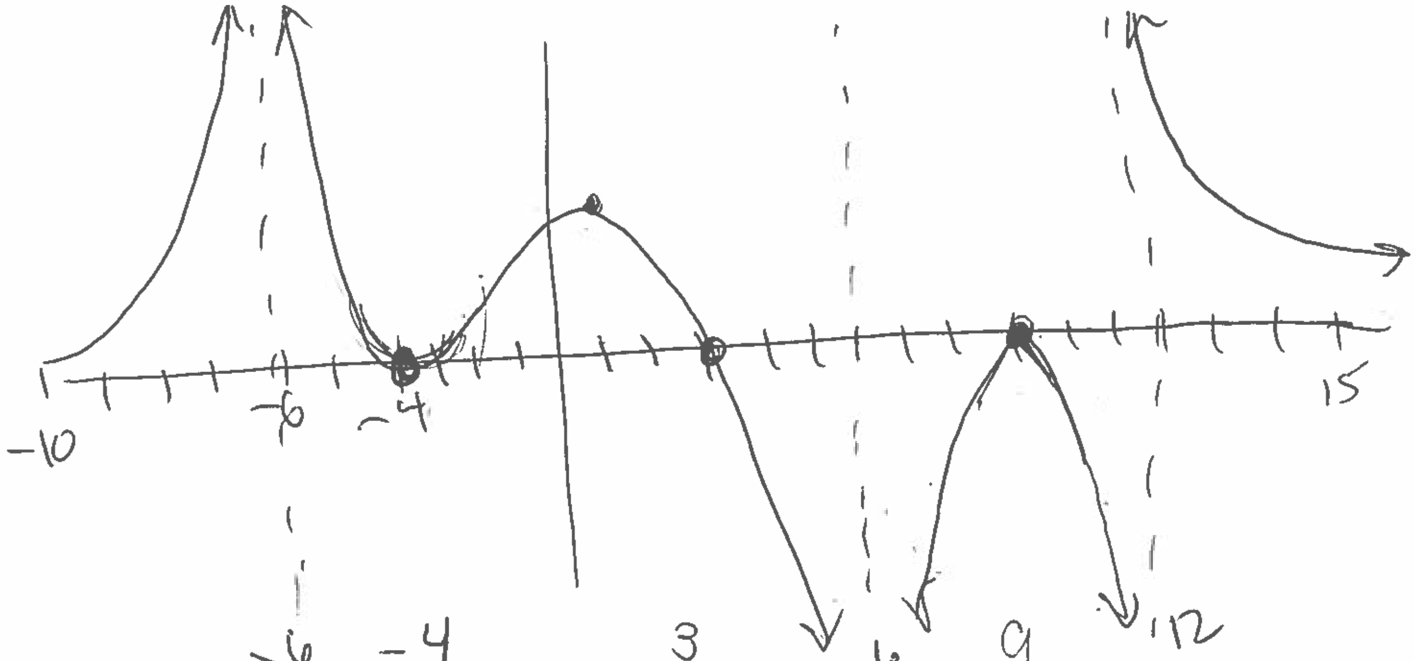


x-int | Positive | x-int | Function Negative | x-int | Function Positive



Zeros: f'(x)
Critical Numbers
(Include f'(x) is undefined

Increasing | Rel. MAX. | Decreasing | Rel. Minimum | Increasing



-6, -4, 3, 6, 9, 12

Y: + | -6 (ND) | + | -4 (0) | + | 3 (0) | − | 6 (ND) | − | 9 (0) | − | 12 (ND) | +

Func positive; V. Asym.; Positive; X INT; Func. Positive; X int; Fct. Neg; V.A.; Func Neg; X int; V.A.; Func Positive

-4, 1, 6, 9

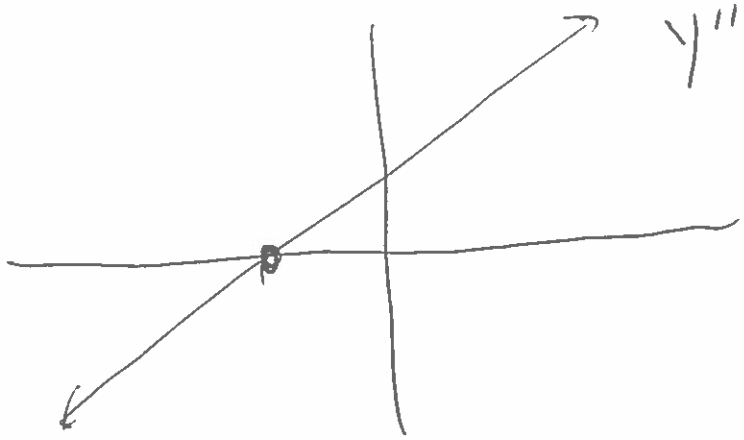
Y′: + | VA (ND) | − | -4 (0) | + | 1 (0) | − | 6 (ND) | + | 9 (ND) | − | 12 (ND) | −

inc.; VA; Dec; MIN; Inc; MAX; Dec; VA; Inc; MAX CORNER; Dec.; VA; Dec.

-2

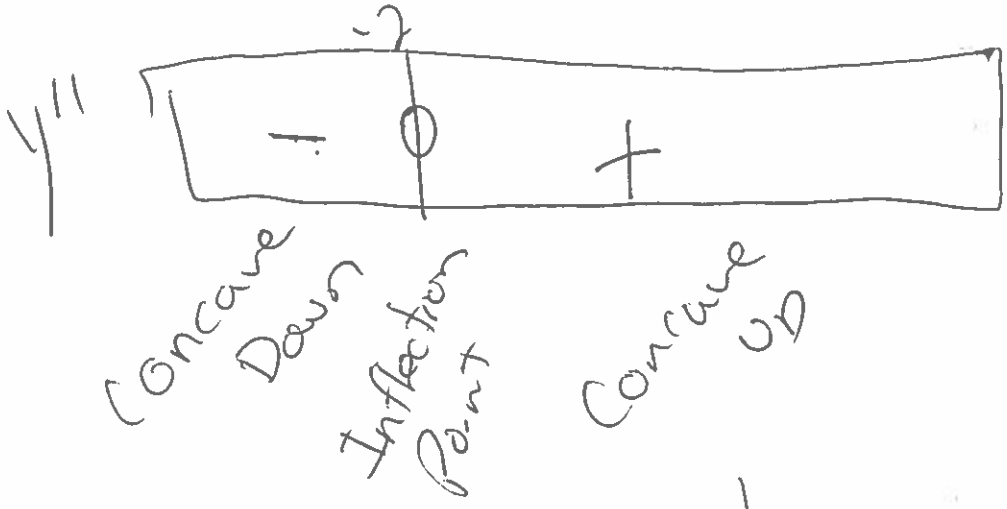
Y″: + | (ND) | + | -2 (0) | − | (ND) | − | (ND) | − | (ND) | +

Concave Up; Concave Up; Inflection Point; Concave Down; Down; Down; Up

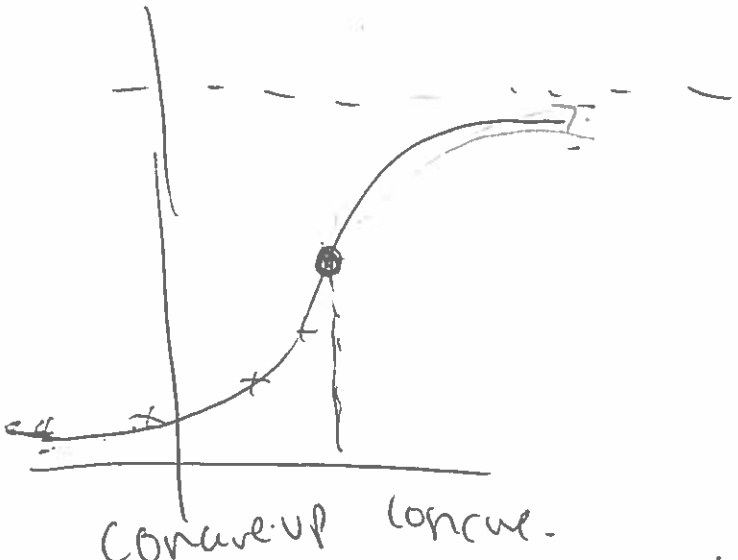


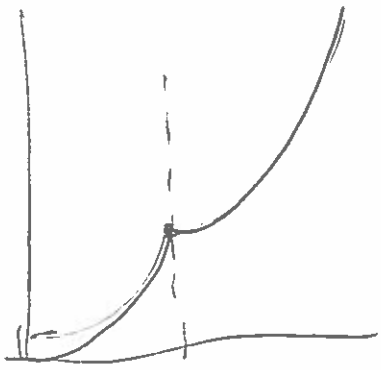
Zeros: $f''(x)$

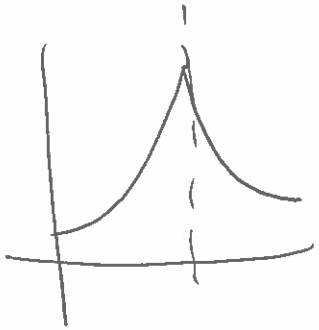
Inflection Pts

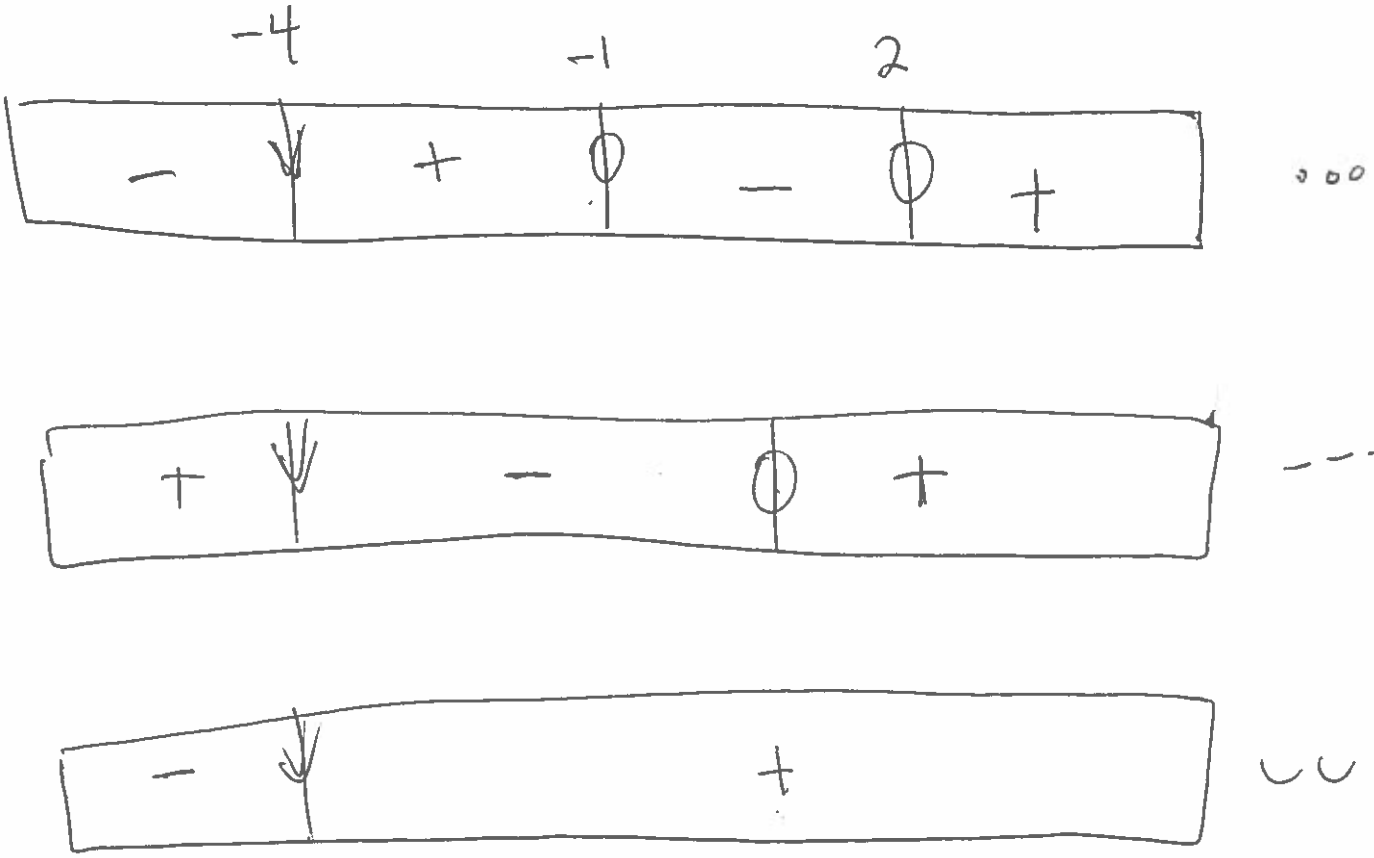


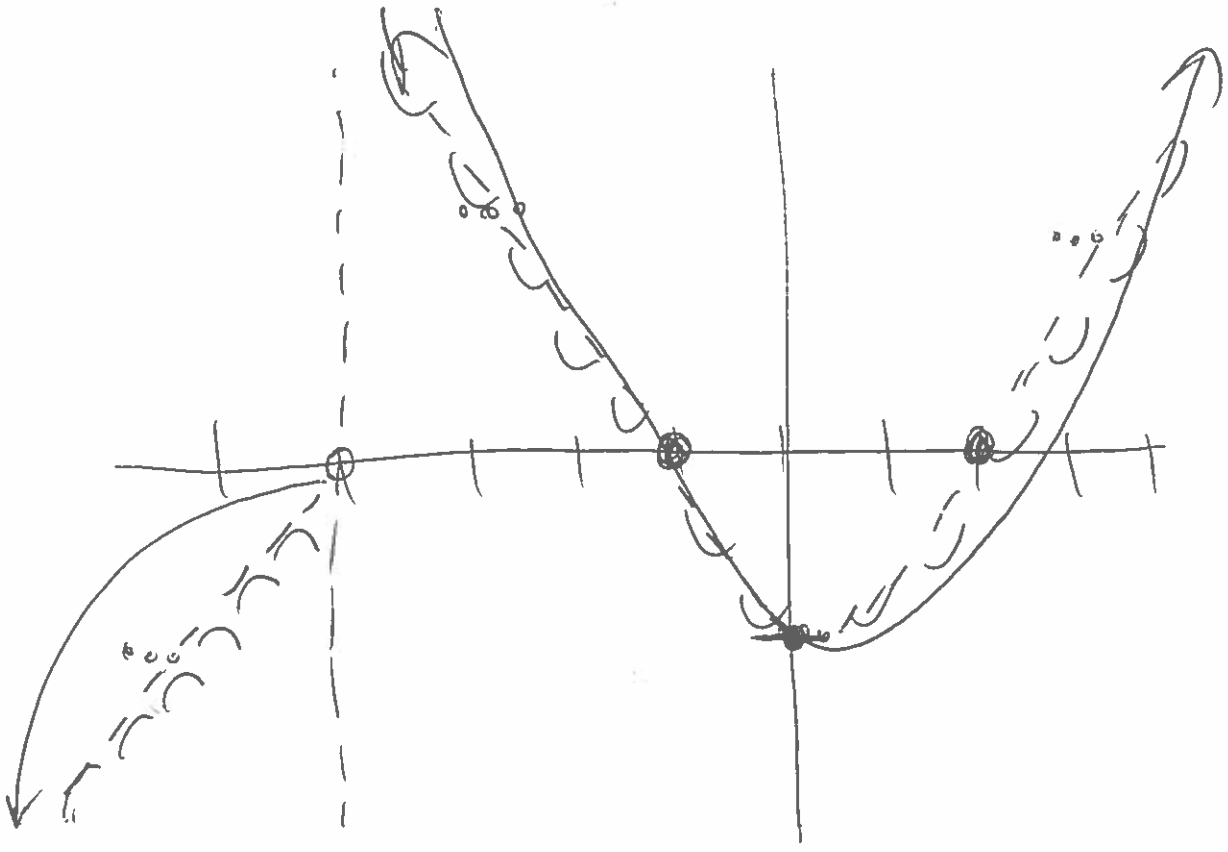
Logistic Model








-4
-1
2
- + - +
+ -
-
+



GROUP NAME: P. minion's

Date: 3/13/14

Student Names (First and Last)

Speaker/Presenter: Jason / Kero

Writer/Prep: Jenn

Leader/Collaborator: Daniella

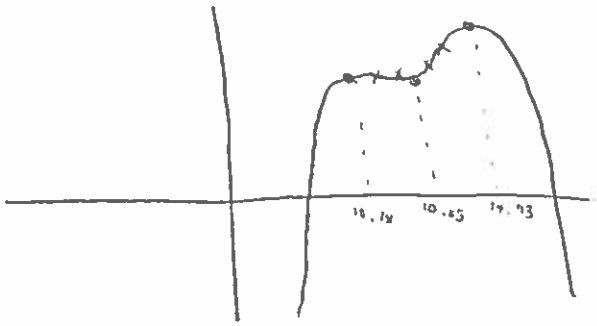
Independant Variable (x-axis): years

Dependant Variable (y-axis): $ tuition

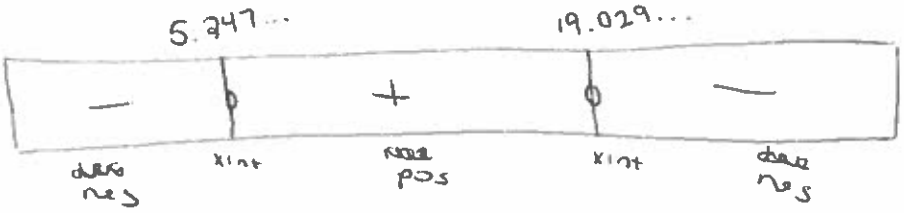
Conclusion (in words):

Realistic domain between 2005 & 2014
our inflection point is 10.503... and 13.475...

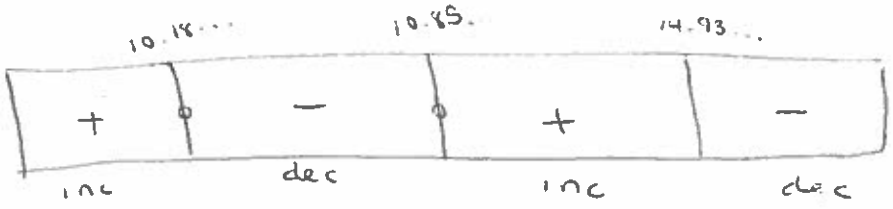
Supporting Work:



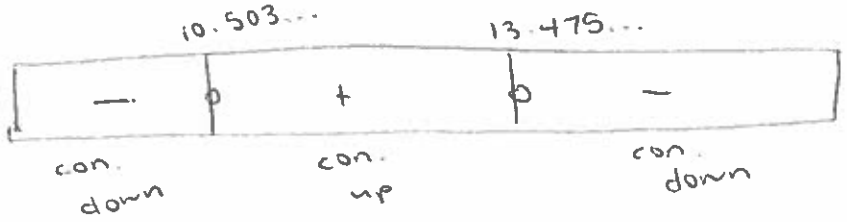
y



y'



y''



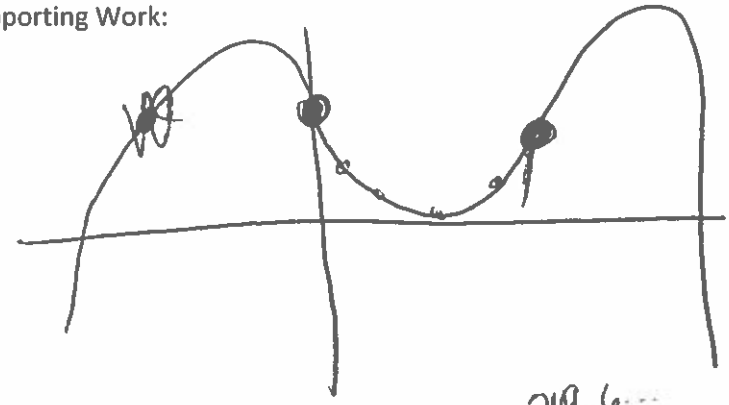
GROUP NAME: Fluffy Ponies
Date: 3/13/14

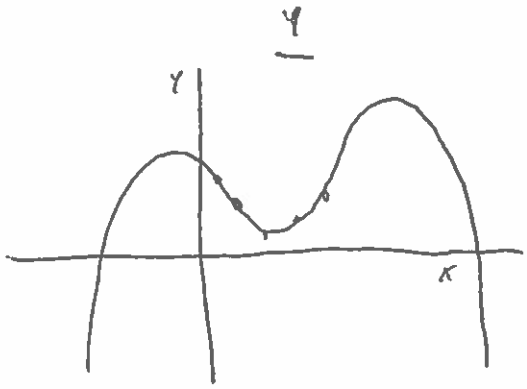
Student Names (First and Last)
Speaker/Presenter: Milton/Ahmed
Writer/Prep: Courtney
Leader/Collaborator: Tyler/June

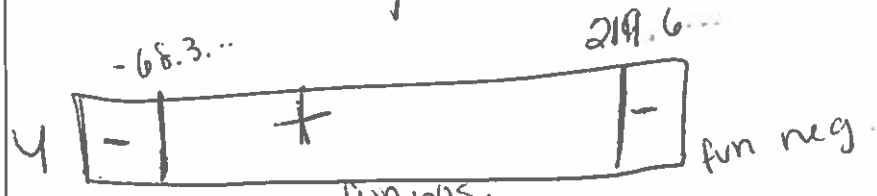
Independant Variable (x-axis): income
Dependant Variable (y-axis): crime rate

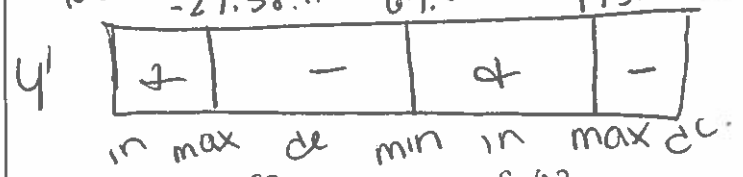
Conclusion (in words):
This graph is only true and make sense from 0 to 219.6.
Our inflection points are at x = 11.97... and 128.02.

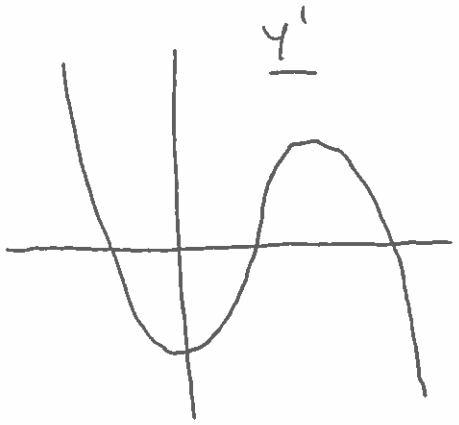
Supporting Work:

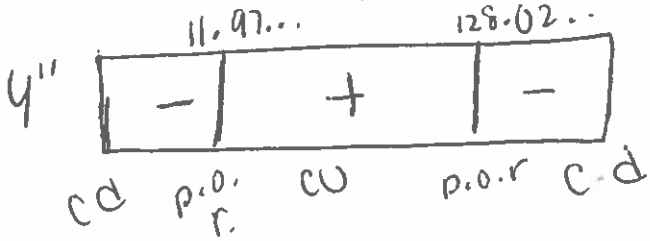


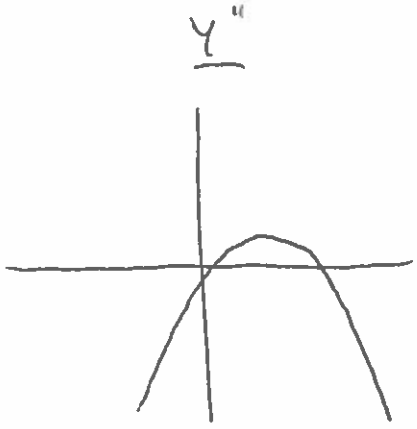












GROUP NAME: W.H.O.

Date: 3/13/14

Student Names (First and Last)

Speaker/Presenter: Michael, Jenna

Writer/Prep: Charles, Kathleen

Leader/Collaborator: Cathryn

Independant Variable (x-axis): years

Dependant Variable (y-axis): Steroid levels in ppm

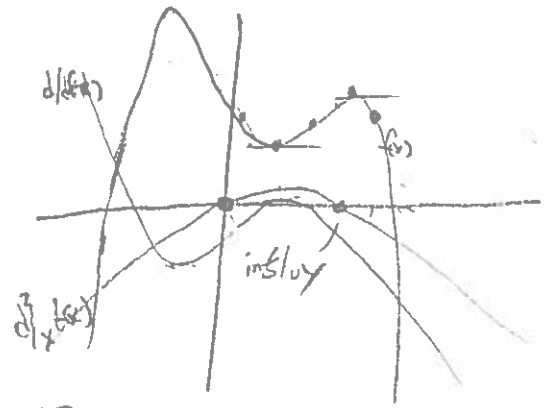
Conclusion (in words):

According to the graph our domain will be between the two zeros where it shows the graph decreasing at the end.

Supporting Work:

Data

x	y
.01	122
3	100
6	143
9	200
12	170



Only quadrant one has a valid domain until 14.2

$0 \le x \le 14.2$