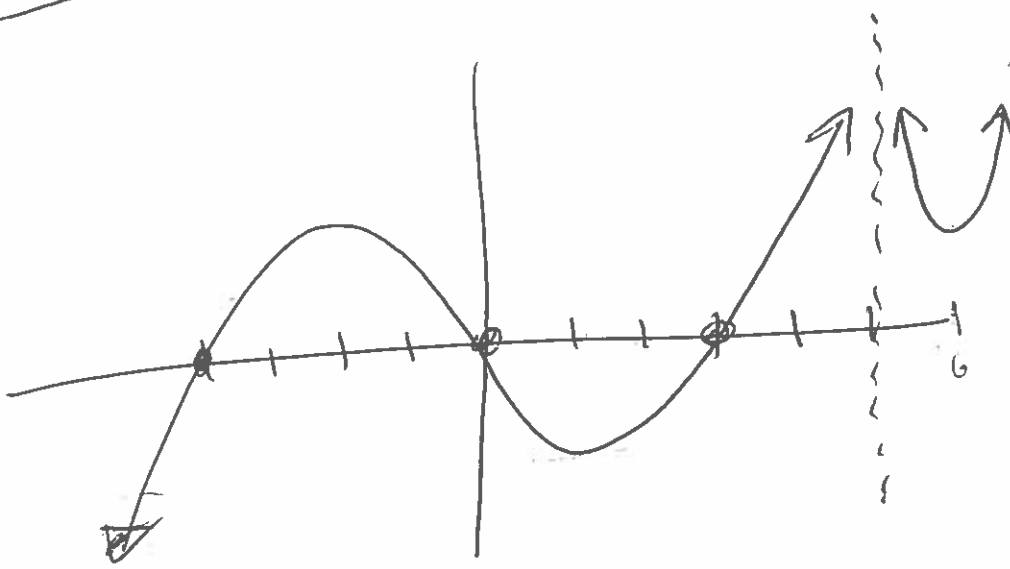
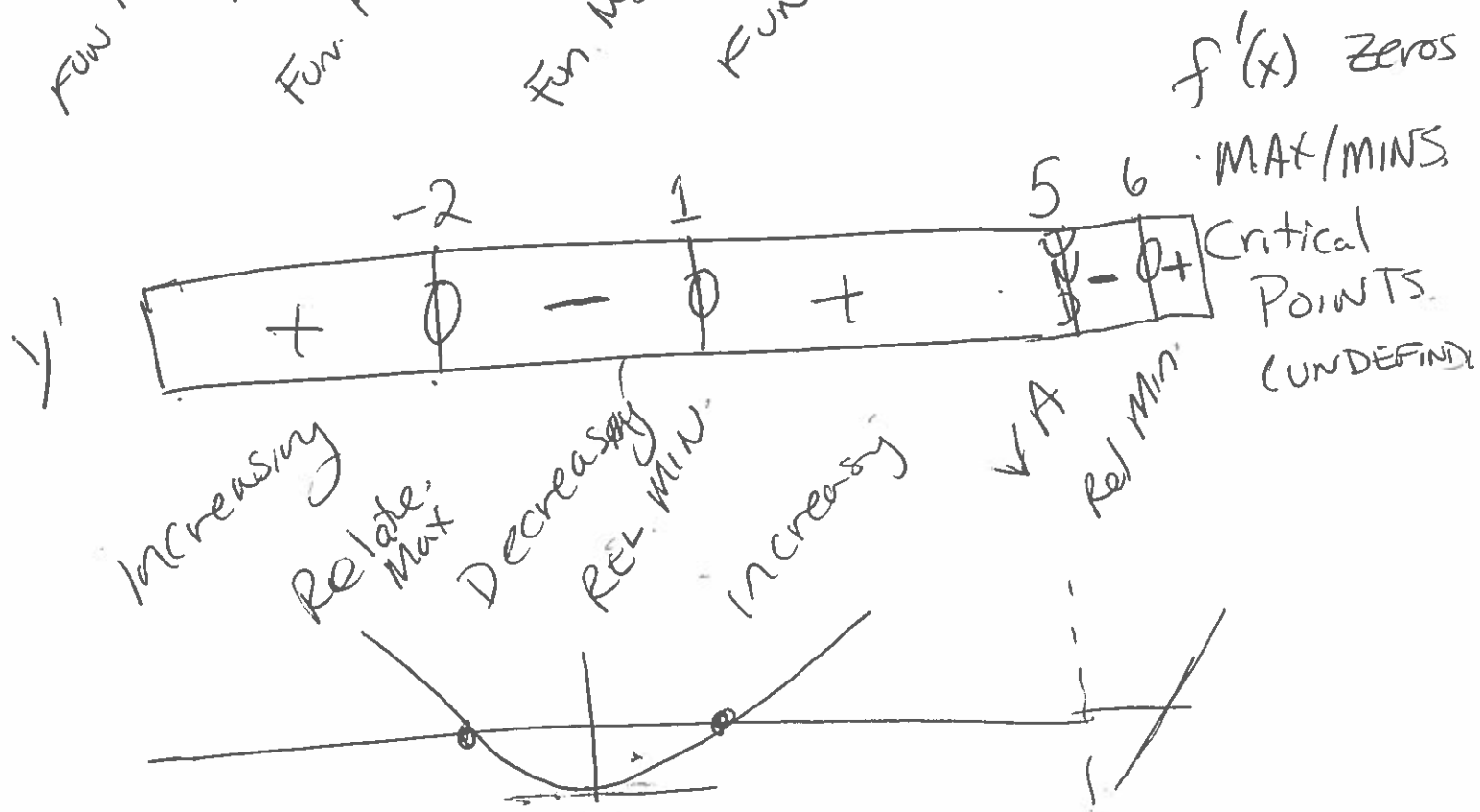
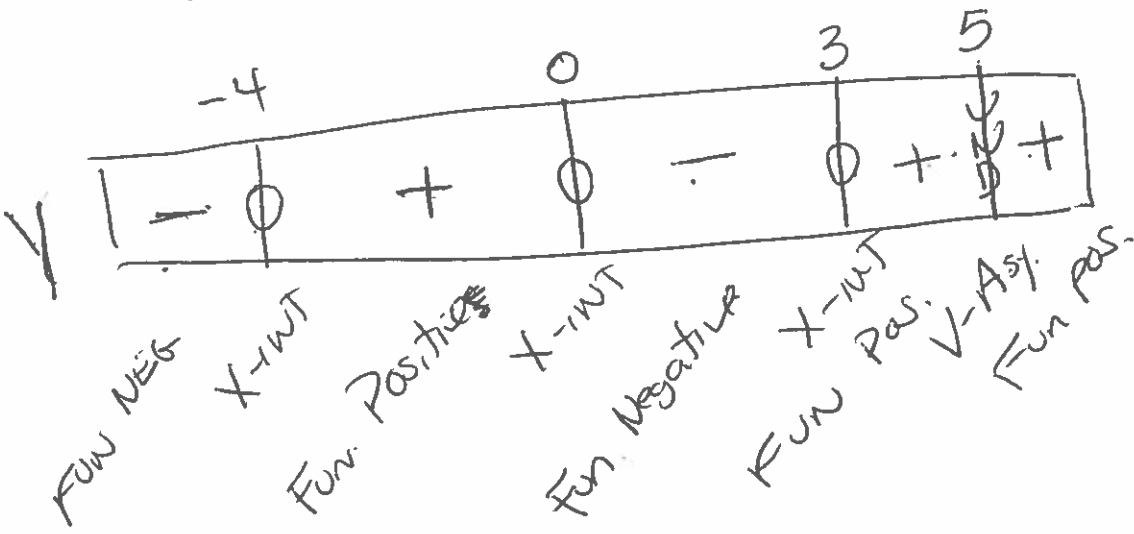


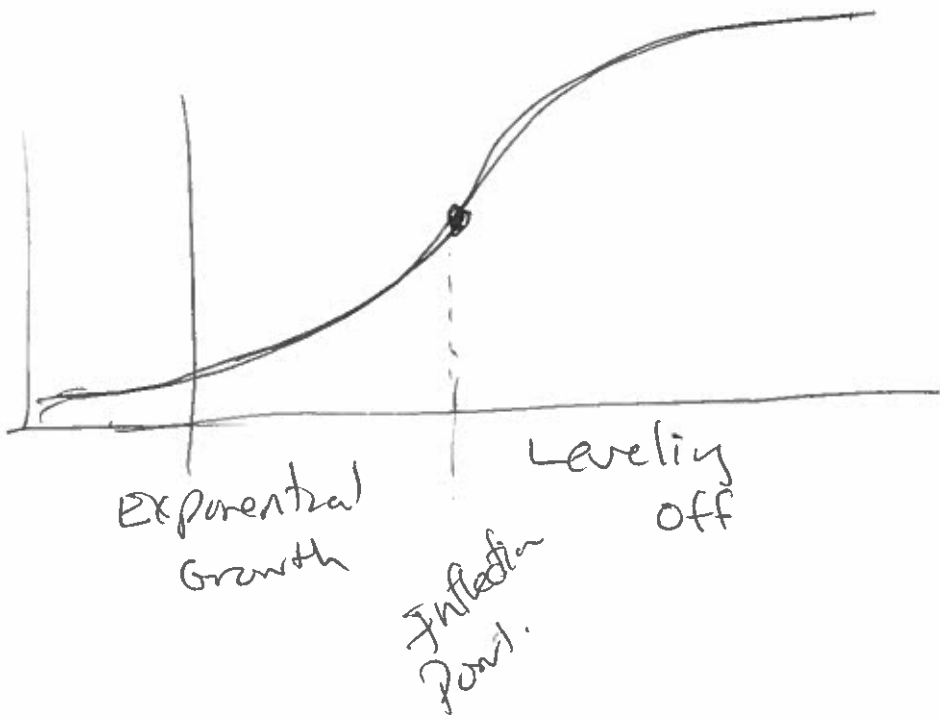
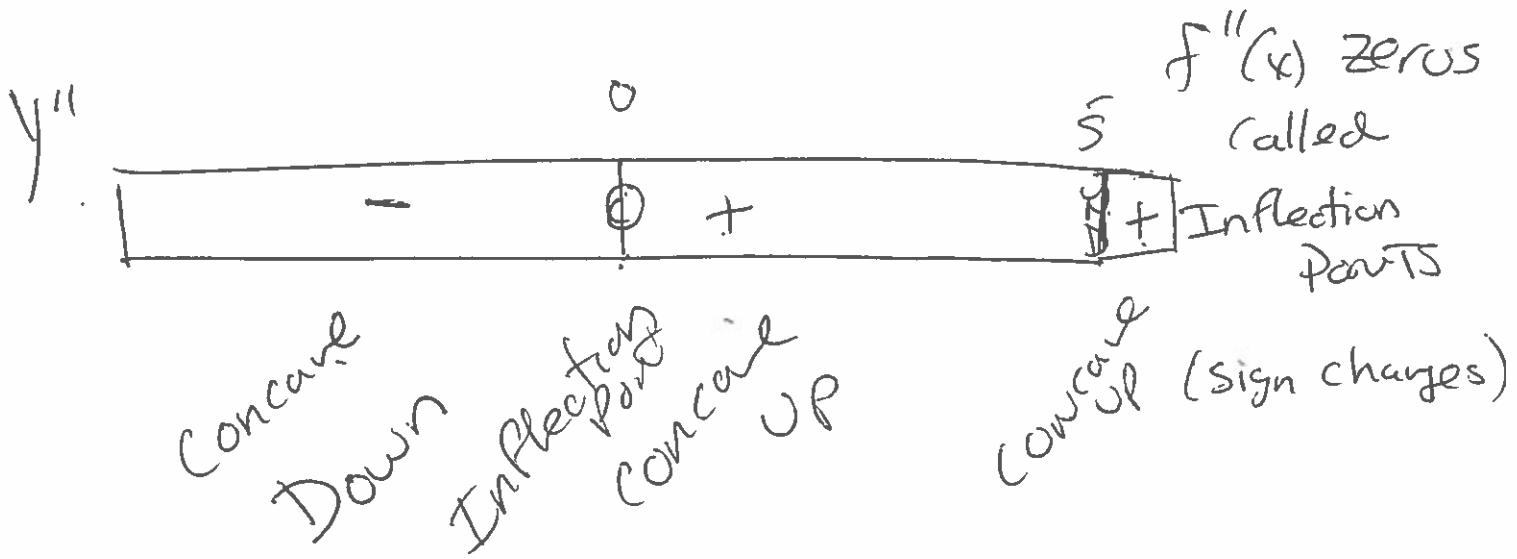
# Analysis of Functions

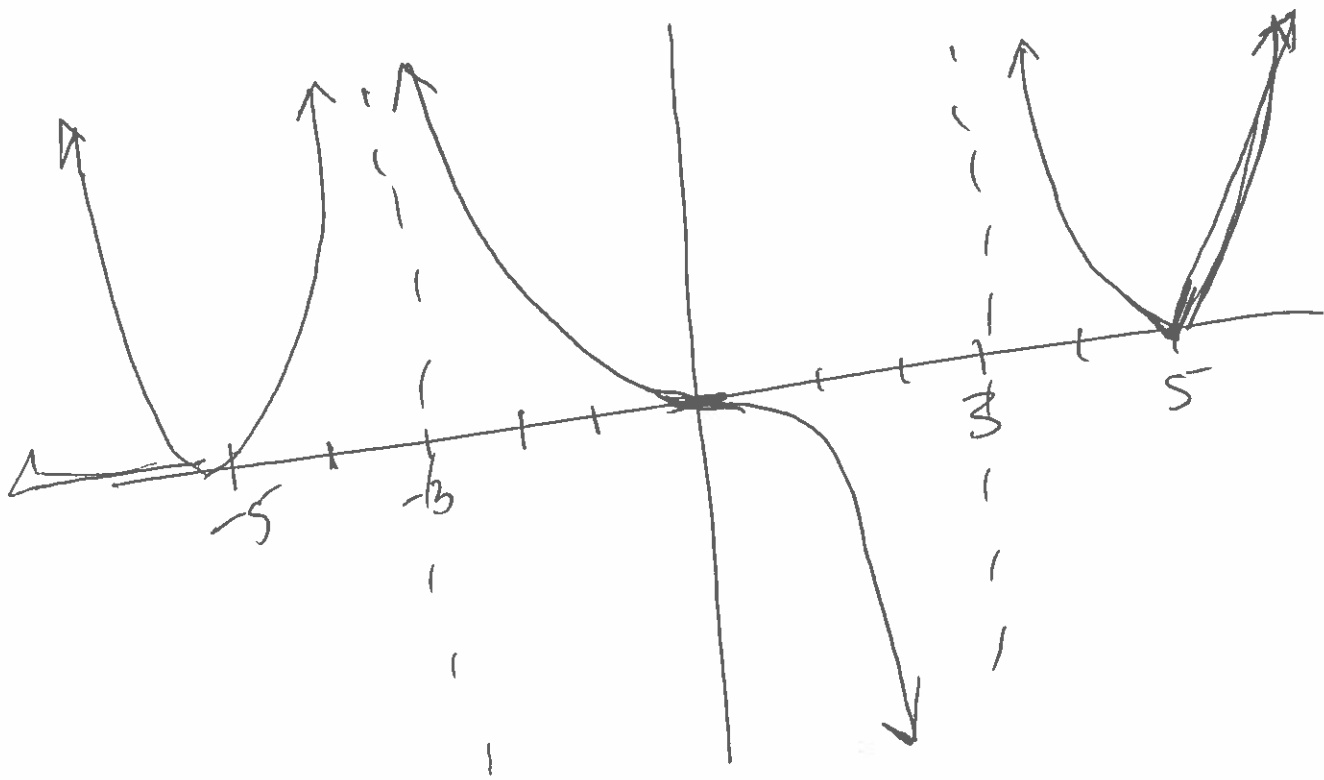
151 & 117



$f(x) = \text{Zeros}$   
 $x$ -intercepts  
 VA. (zeros of Denominator)



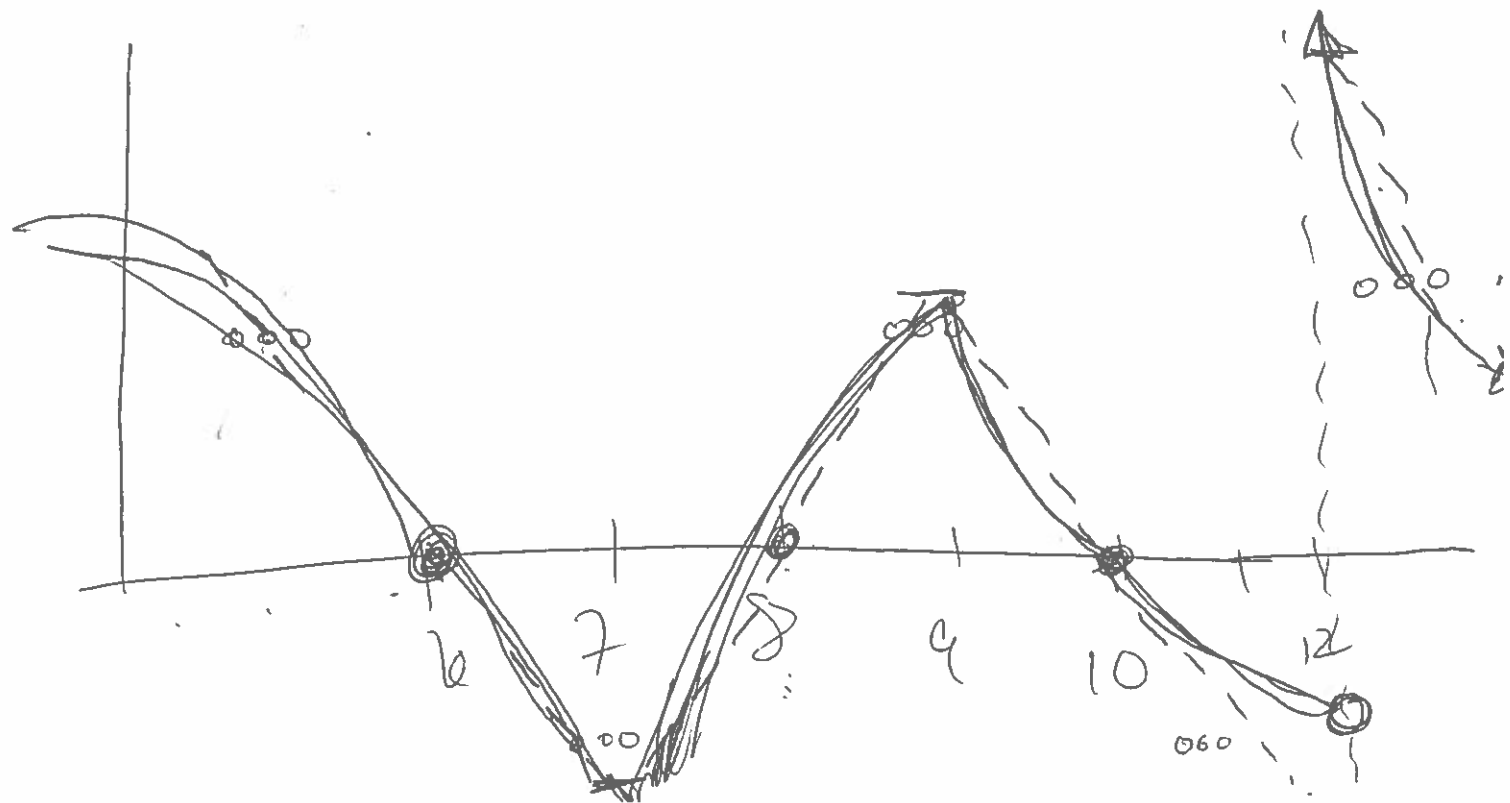
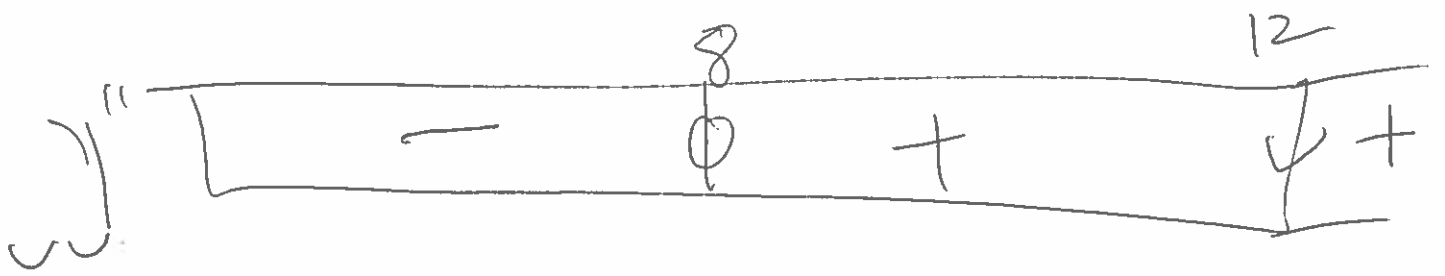
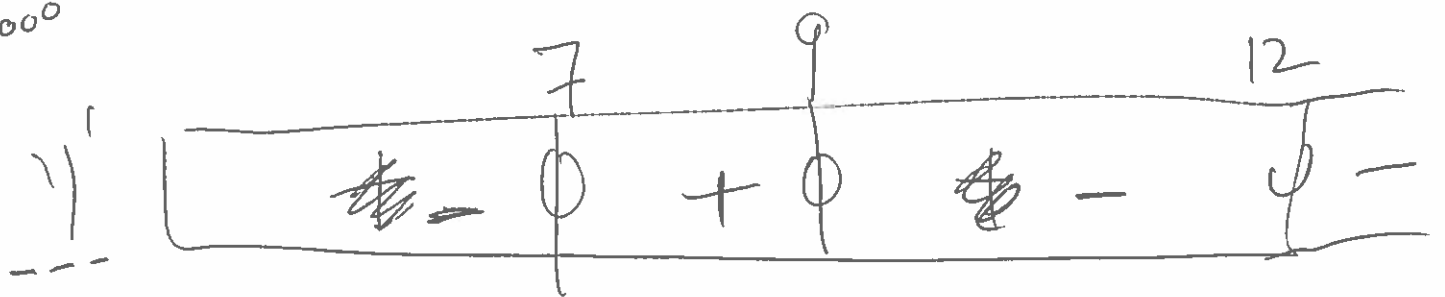
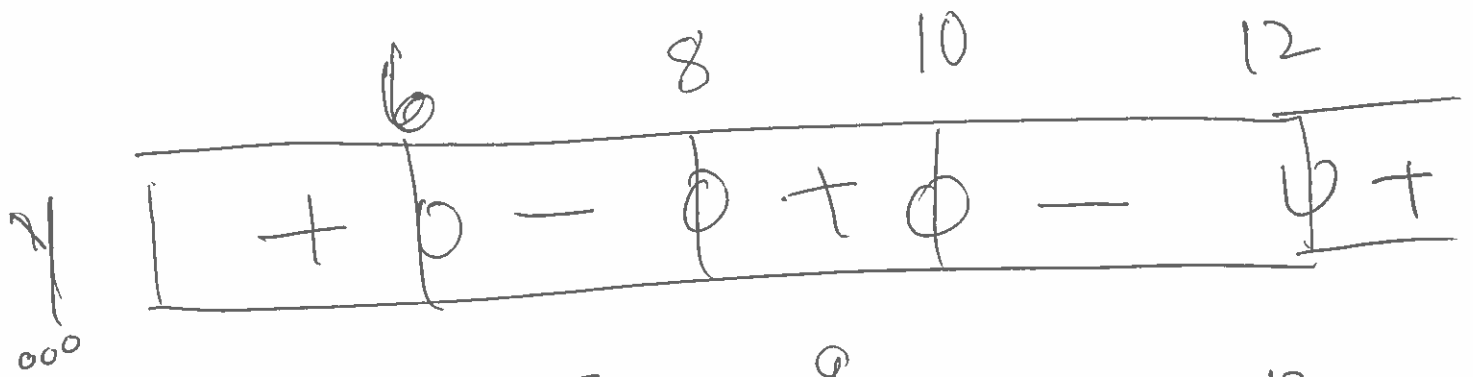


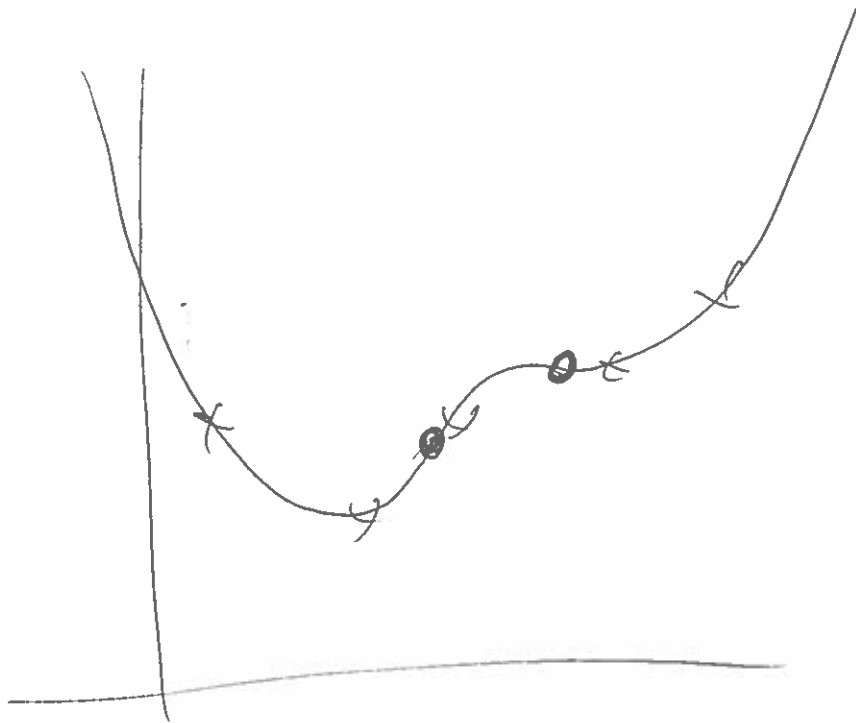


	-5		-3		0		3		5		
$Y$	+	0	+	<del>0</del>	+	0	-	<del>0</del>	+	0	+
	POS	HNUT	POS	VA	POS	HNUT	NEG	VA	POS	HNUT	POS

	-5		-3		0		3		5		
$Y'$	-	0	+	<del>0</del>	-	0	-	<del>0</del>	-	<del>0</del>	+
	DEC	MIN	INC	VA	DEC	"CUSP"	DEC	VA	DEC	MIN	INC

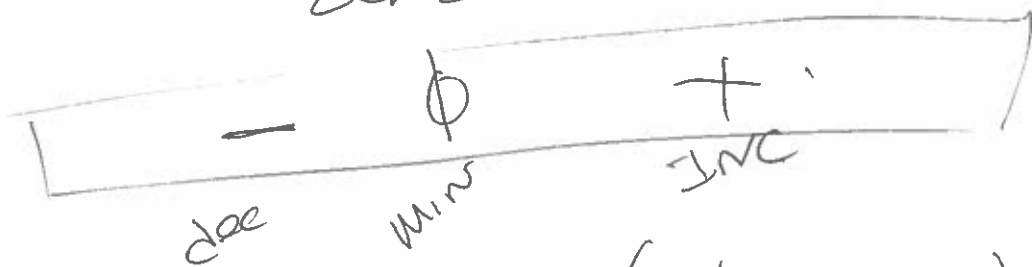
	-3		0		3		5		
$Y''$	+	<del>0</del>	+	0	-	<del>0</del>	+	<del>0</del>	+
	UP	VA	UP	INFLECT.	DOWN	VA	UP	CORNER	UP



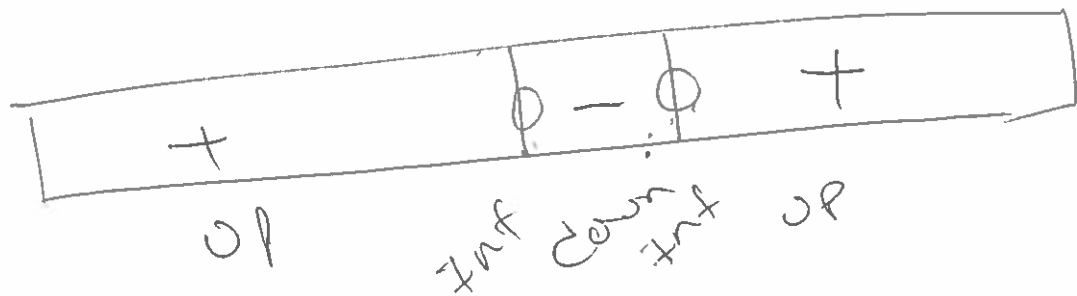


$Y_1 = \text{Quart Poly}$

$Y_2 = \text{nderv}(Y_1, X, X)$   
Zeros.



$Y_3 = \text{nderv}(Y_2, X, X)$



# Realistic Domain?



Zeros for  $y'$

Guess

$$3 \xrightarrow{\text{STO}} X$$

$$X - Y_2 / \text{ndenv}(Y_2, X, X) \xrightarrow{\text{STO}} X$$

(enter)

GROUP NAME: Team Squiggles

Date: 3-13-14

Student Names (First and Last)

Speaker/Presenter: Michelle

Writer/Prep: Kevin I

Leader/Collaborator: \_\_\_\_\_

Independent Variable (x-axis): years messi scores

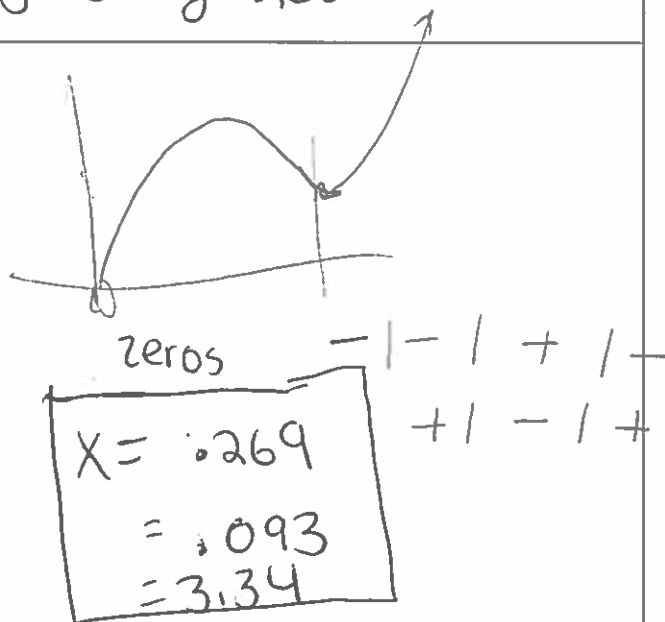
Dependant Variable (y-axis): # of goals scored

Conclusion (in words):

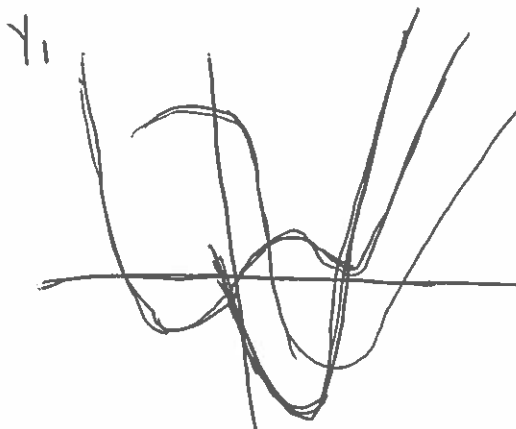
Messi was ~~so~~ scoring more goals till the third year and started scoring less goals by 2005.

Supporting Work:

~~Y max 80.084~~      ~~Y min 16.641~~  
~~X min -1.243~~      ~~x max 2.05~~  
 4.33  
 -1.249



(years) X	Y (goals scored)
1	50
2	80
3	60
4	23
5	44



GROUP NAME: El Business

Date: 3/13

Student Names (First and Last)

Speaker/Presenter: Andy

Writer/Prep: Brittany

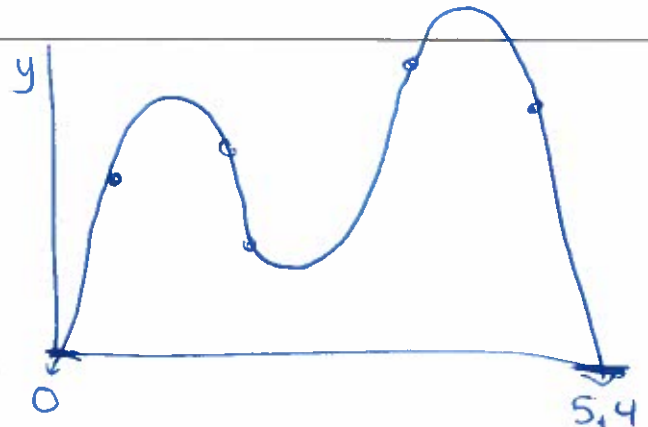
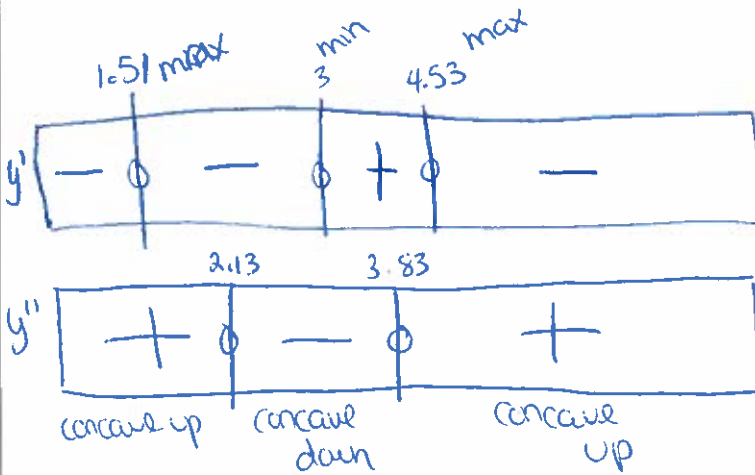
Independent Variable (x-axis): world cup games

Leader/Collaborator: \_\_\_\_\_

Dependant Variable (y-axis): goals scored

Conclusion (in words): The world cup would best end in the 5<sup>th</sup> game; the best game to see would be the 4<sup>th</sup>.

Supporting Work:





GROUP NAME:

Student Names (First and Last)

Date: 3/13

Speaker/Presenter: DOMINIQUE

Independent Variable (x-axis): years

Writer/Prep: Harrison

Dependant Variable (y-axis): salary

Leader/Collaborator: Lidsy

Conclusion (in words): At 10 years the employee reached their max. relative

Supporting Work:

$L_1$	$L_2$
10	65
11	72
12	86
13	94
14	102

Quartic Reg

$a = .791...$

$b = -38.58...$

$c = 701.208...$

$d = -5621.4116...$

$e = 16825$

$Y_1 = .791...x^4 - 38.58...x^3 + 701.208x^2 - 5621.411x + 16825$

$Y_2 = \text{in Deriv}(Y_1, X, X)$

Zeros at  $y_2 = 11.27$

$\frac{13.09}{10.16}$

$y_3 = 10.16$

$Y_3 = \text{in Deriv}(Y_2, X, X)$

