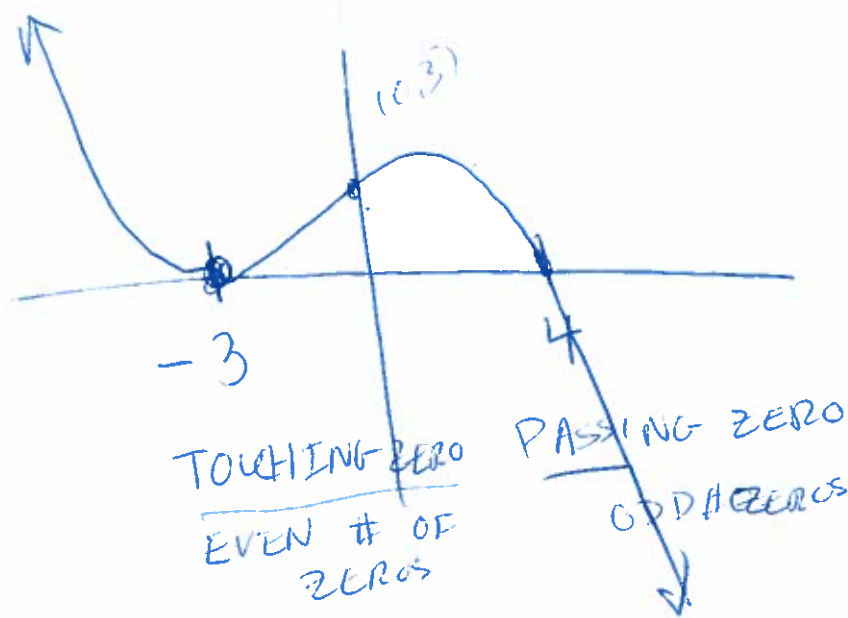


Making an Equation from a Graph



Find an Equation: —

X-intercepts: -3 4

Factors $(x+3)^2 (x-4)^1$

END BEHAVIOR DISCO LEFT

LEAD NEG

DEGREE ODD

$$y = - (x+3)^2 (x-4)$$

Rational Functions

$$f(x) = \frac{P(x)}{q(x)}$$

$\frac{P(x)}{q(x)}$ Zeros Numerator, Degree, Lead
Denominator

$$\frac{-2(x+1)^2(x+5)}{5(x-2)^1(x-4)^2}$$

$$ZN: -1, -5$$

$$DN: 3$$

$$LN: -2$$

$$ZD: 2, 4$$

$$DD: 3$$

$$LD: 5$$



Z/N ← where the function touches or passes thru.

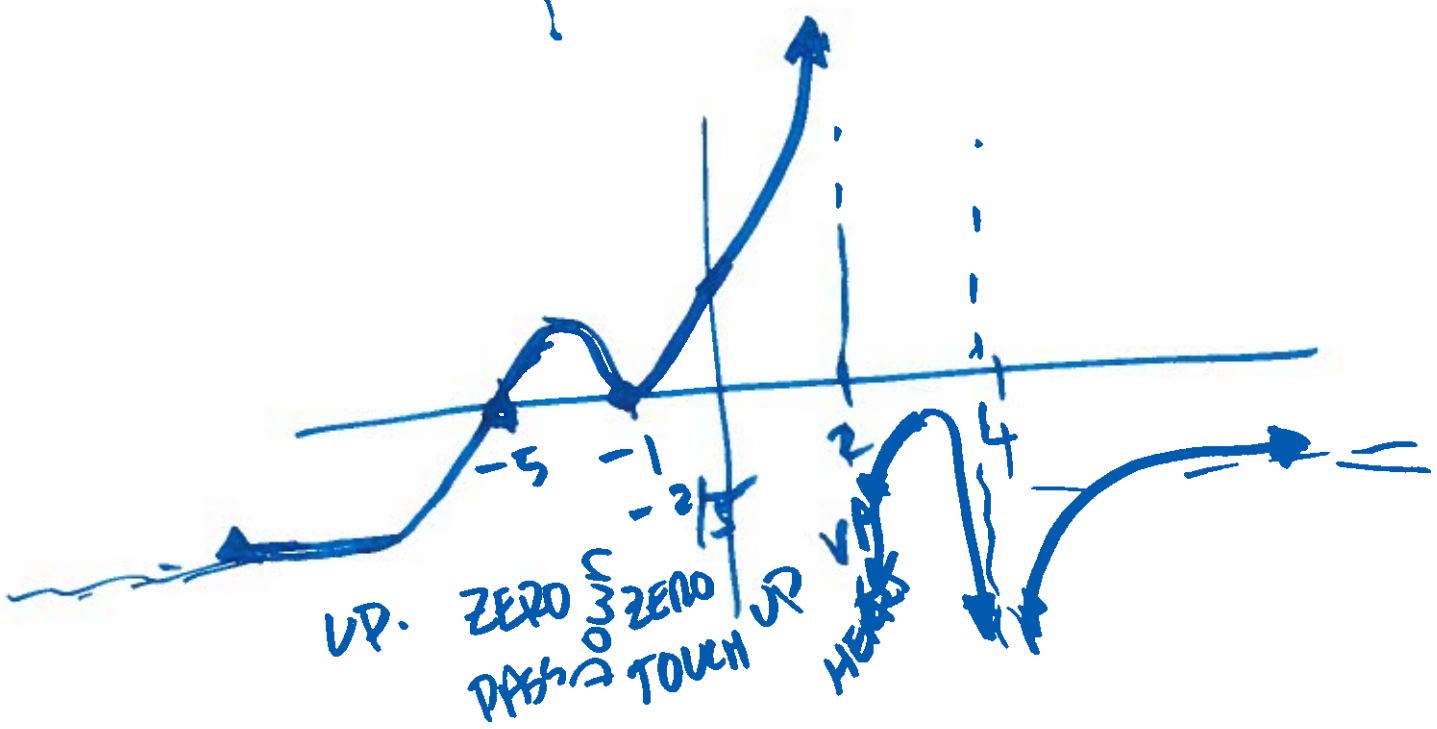
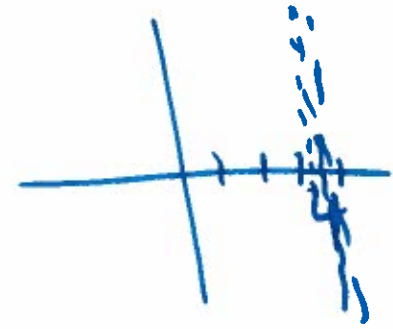
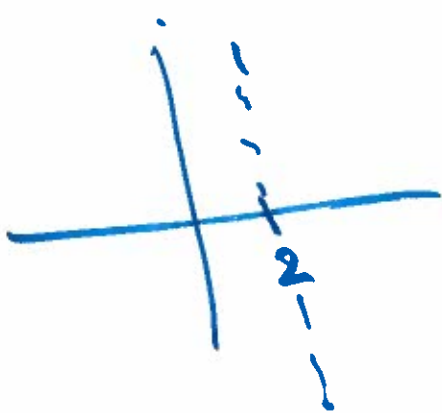
-1: touches Even Power

-5: Passes Thru. odd Power

Z/D ← Vertical Asymptotes

ODD Power 2
EVEN Power 4

Heart beat 
Volcano 

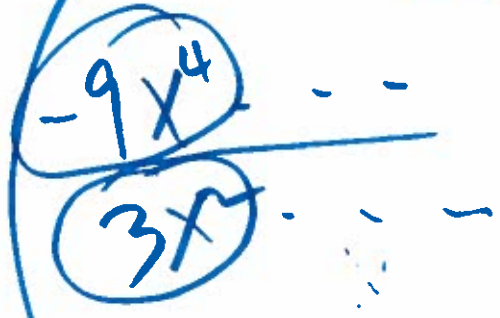


END BEHAVIOR



$DN > DD$

How END:



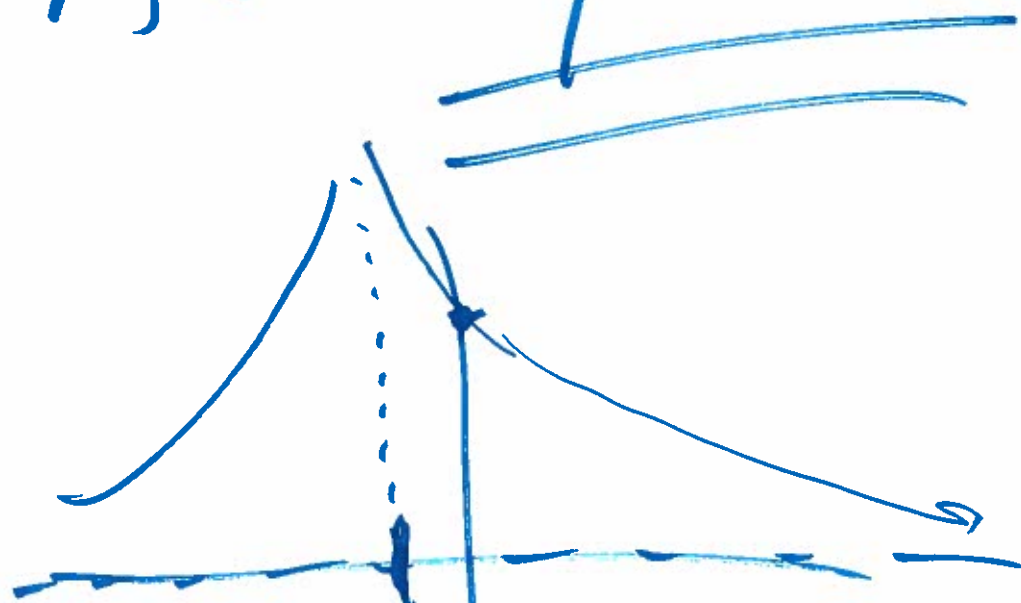
$DN - DD$
 ODD = Discontinuous
 EVEN = Parabolas
 $\frac{LN}{LD} = \text{NEG or POS}$

SLANT ASYMPTOTES

$$DN < DD$$

Horizontal
Asymptote

AT $y = 0$



$$y = \frac{-1}{(x+1)}$$

$(x+1)^2$ volume
at $x = -1$

$$DN = DD$$

Horizontal Asymptote.

$$= \frac{LN}{LD}$$

$$= \frac{-2}{5}$$

GROUP NAME:

Date: 7/1/14

Student Names (First and Last)

Speaker/Presenter: Melissa Scarpetti

Independent Variable (x-axis): hours worked

Writer/Prep: Angelica Lopez

Dependant Variable (y-axis): wages earned

Leader/Collaborator: Kevin Enriquez

Conclusion (in words):

The more hours you work at the cookie factory, the more \$ you make. Less hours = less \$.

Supporting Work:

\$8.25/hour

X	Y
36	\$297
20	\$165
40	\$330
15	\$123.75

X-Int : 36, 20, 40, 15

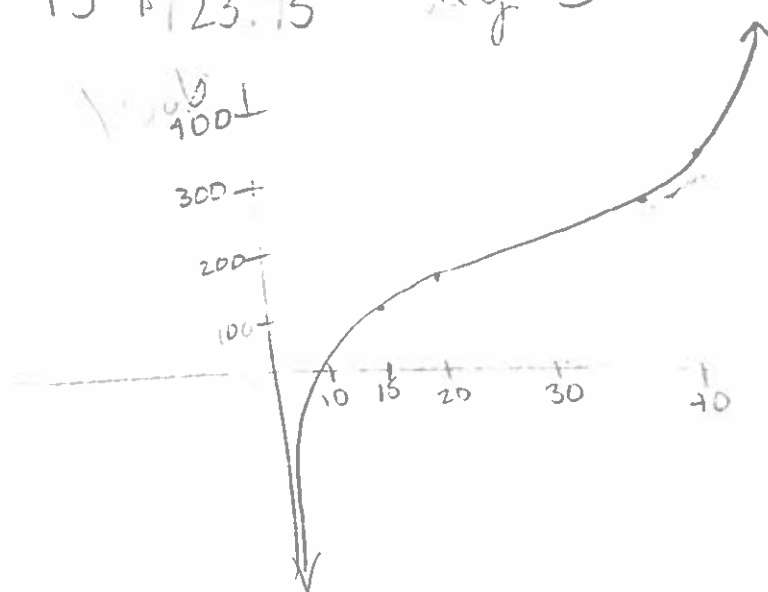
factors: $(x-36)(x-20)(x-40)(x-15)$

end behavior: disc right

lead: pos

deg: 3

$\frac{1.25}{1}$



$$(x-15)(x-20)(x-36)(x-40)$$

$$x^2 = 40x - 36x + 1440$$

$$(x-15)(x-20)(x^2 - 76x + 1440)$$

GROUP NAME: Math lovers

Student Names (First and Last)

Date: _____

Speaker/Presenter: osman

Independent Variable (x-axis): price Sim card

Writer/Prep: Karthik

Dependant Variable (y-axis): sell

Leader/Collaborator: NOCY Cheema

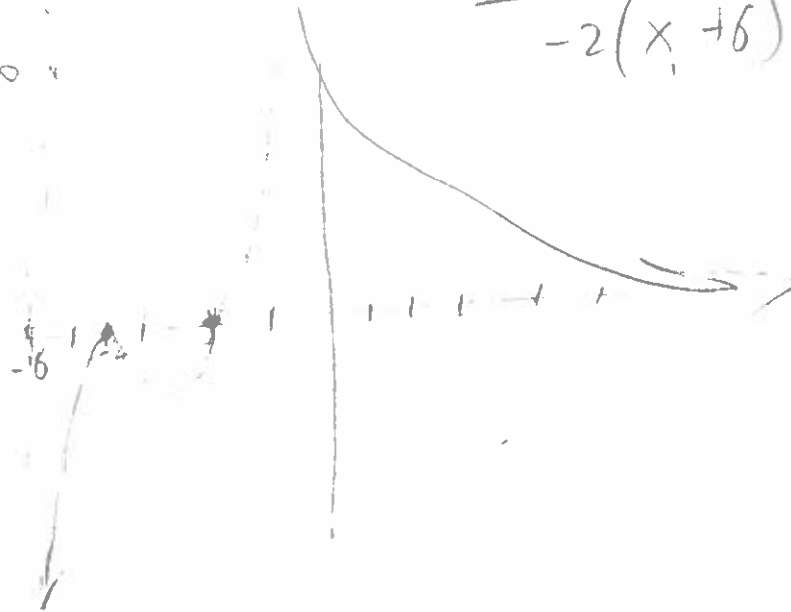
Conclusion (in words):

when I rise the price
I will sell less product

Supporting Work:

x	y
-4	0
-2	-∞

$$\frac{(x+4)(x+2)}{-2(x+6)}$$



GROUP NAME:

Student Names (First and Last)

Date: 2/11/11

Principles of Algebra

Speaker/Presenter: David Thomas

Independent Variable (x-axis): time (min)

Writer/Prep: John Thomas

Dependant Variable (y-axis): time (min)

Leader/Collaborator: Alfred Thomas

Conclusion (in words):

The graph of the parabola
is

Supporting Work:

Parabola

graph



<p>GROUP NAME:</p> <p>Date: <u>02/</u></p>	<p>Student Names (First and Last)</p> <p>Speaker/Presenter: <u>A. Ford</u></p>
<p>Independent Variable (x-axis): <u>Cost of weed</u></p> <p>Dependant Variable (y-axis): <u>people who will buy it.</u></p>	<p>Writer/Prep: <u>Christina Guerra</u></p> <p>Leader/Collaborator: <u>El</u></p>
<p>Conclusion (in words): As ^{cost} time goes on people would like buying ^{less} more weed, because we sell good weed. The lower we sell the weed more people would buy it.</p>	

Supporting Work:

x	y
15	30
25	20
50	10
60	9
70	6



$$f(x) = \frac{(x+3)^2}{3}$$

GROUP NAME: Newbies

Date: 2/11/2014

Student Names (First and Last)

Speaker/Presenter: Krzyszyna Pawlyczyk

Independent Variable (x-axis): Price of laptops

Writer/Prep: Li Yang Lin

Dependant Variable (y-axis): Revenue of Laptops

Leader/Collaborator: _____

Conclusion (in words):

End to 0.

Supporting Work:



GROUP NAME: We love Math

Date: 2/11/14

Student Names (First and Last)

Speaker/Presenter: Craig S.

Writer/Prep: Victor F.

Independent Variable (x-axis): Price

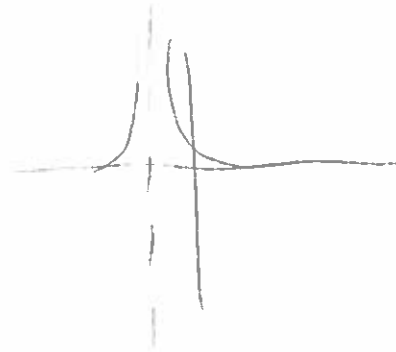
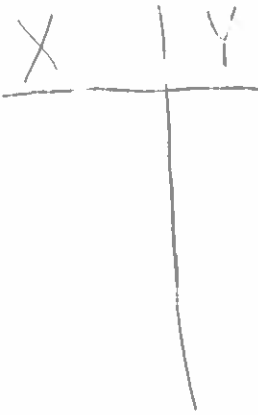
Leader/Collaborator: Lack L.
Joseph Stevens

Dependant Variable (y-axis): Sales

Conclusion (in words):

Sales go to zero as you increase price

Supporting Work:



$$\frac{26}{(x-1)^2}$$

GROUP NAME: MATH JEDI'S

Date: 11 Feb 2014

Student Names (First and Last)

Speaker/Presenter: Tina Kios

Independent Variable (x-axis): Distance (miles)

Writer/Prep: Ricky Wilson

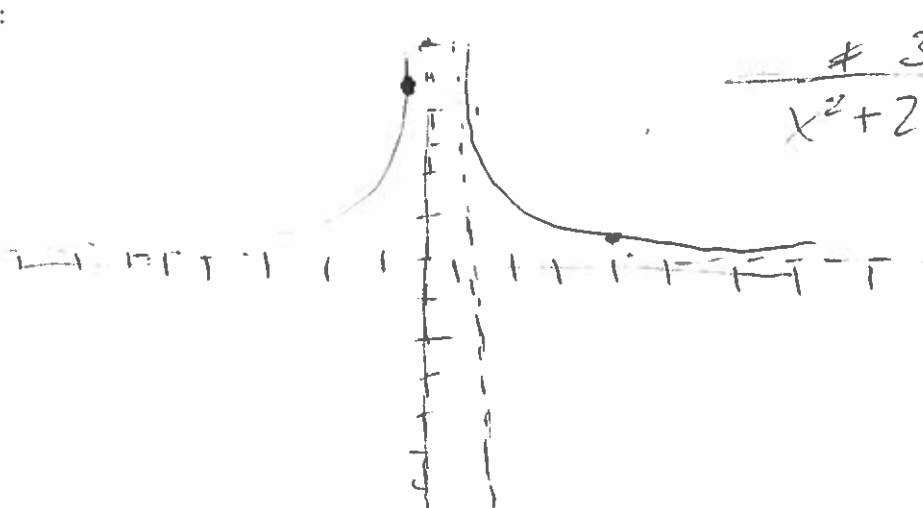
Dependant Variable (y-axis): Price of gas

Leader/Collaborator: Byron Wilson

Conclusion (in words):

volcano, ends like energy (water left running)

Supporting Work:



The further you go the less gas will be closer to \$3.00

GROUP NAME: We love science

Student Names (First and Last)

Date: 02/11/14

Speaker/Presenter: Marta Truszkowski

Independent Variable (x-axis): # cupcakes

Writer/Prep: Yvette Aguilar

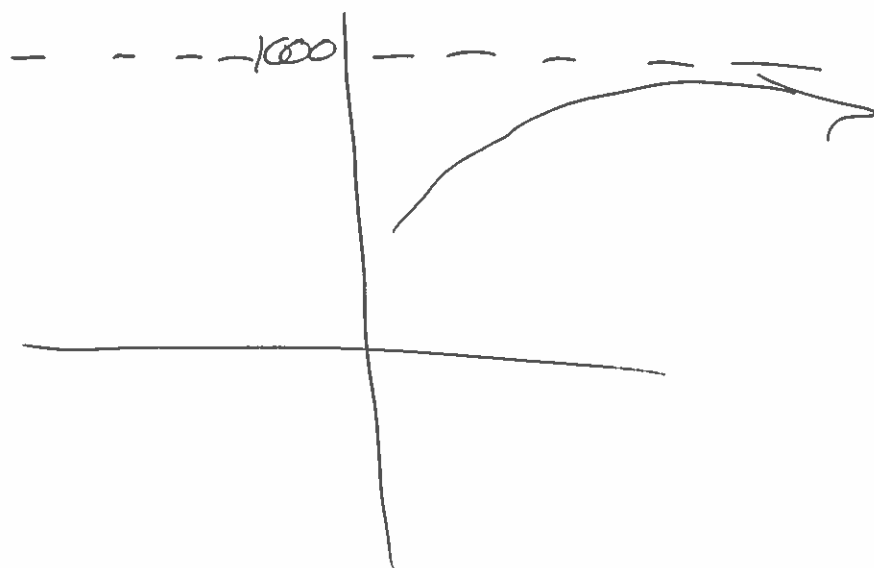
Dependant Variable (y-axis): time (min)

Leader/Collaborator: LOUE KENNETH

Conclusion (in words): one horizontal asymptote would be 1000 because we would run out of ingredients

Supporting Work:

x	y
24	24
48	35
72	47
96	67
120	79



$$\frac{1000x^4}{x^4 + 1} = 1000$$

\uparrow our limit

GROUP NAME:

Student Names (First and Last)

Date: February 11, 2014

Speaker/Presenter: Benjamin Infosino

Independent Variable (x-axis): height

Writer/Prep: Blake Buel

Dependant Variable (y-axis): weight

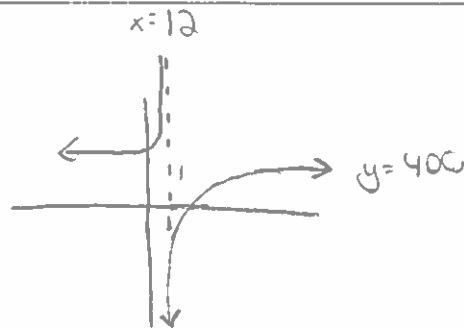
Leader/Collaborator: Kevin Leonard

Conclusion (in words):

the maximum y value (weight) is 400 (lbs.)

Supporting Work:

$$f(x) = \frac{400(x-12)}{x}$$



minimum height = 12

maximum weight = 400

heart beat