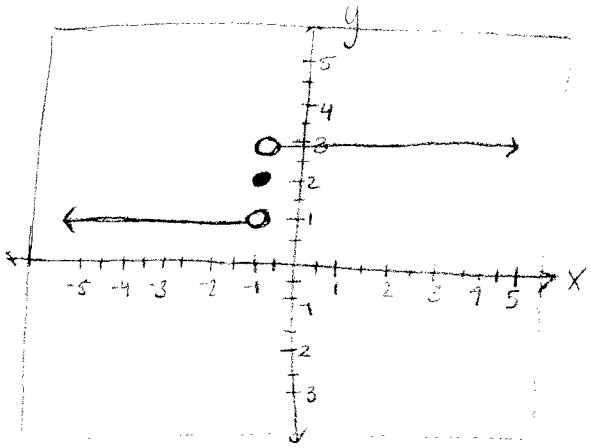
GROUP NAME: ? ? ? ! ! !	Student Names (First and Last)
Logo:	Speaker/Presenter: Hüma Ali
Date: 3/28	Writer/Prep: Kayla James
Topics:	QC/Leader: Shriam Singh

Instructions:

1

$(-1, 2)$

$$g(x) = \begin{cases} 1 & \text{if } x < -1 \\ 2 & \text{if } x = -1 \\ 3 & \text{if } x > -1 \end{cases}$$



1 if x is less than -1

open circle at (-1,1) arrow to the left to include all #'s $(-\infty, 1]$

2 if x equal -1

closed circle at (-1,2) no arrows because its equal

3 if x greater than -1

open circle at (-1,3) arrow to right to include all #'s to $[-1, \infty)$

circles

equal = closed

less/greater = open

GROUP NAME: Teen Awesome	Student Names (First and Last)
Logo:	Speaker/Presenter:
Date:	Writer/Prep: Quay Jackson
Topics:	QC/Leader: Willa Smith

Instructions:

#2

$f(x) = x^5 - 3x^3 - 2x^2 + 2$

A is positive

degree is odd : 5

Falls to the left Disco Right

rise to the right

$f(x) = 3x^3 + 6x^2 + 9x + 4$

A is positive

degree is odd : 3

Falls to the left Disco Right

rises to the right

$f(x) = -x(x-3)(5x+2)$

A is negative

degree is ~~negative~~ odd : 3

rises to the left

falls to the right Disco left

GROUP NAME: Scientists

Logo:

Date: 3/27/13

Topics:

Student Names (First and Last)

Speaker/Presenter: Nicole P.

Writer/Prep: Sabella L.

QC/Leader: Kaitlin M.

Instructions: (Test 2) #3

Find all x intercepts and y intercepts of the graph of the function

$f(x) = 2x^3 + 2x^2 - 18x - 18$

for y: set all x's to 0.

$2(0)^3 + 2(0)^2 - 18(0) - 18$

$y = -18$

for x: factor.

$(2x^3 + 2x^2) + (-18x - 18)$

$2x^2(x+1) - 18(x+1)$

$(2x^2 - 18)(x+1)$

$2(x^2 - 9)(x+1)$

$2(x-3)(x+3)(x+1)$

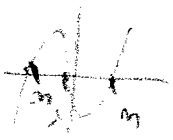
zeros: 3, -3, -1.

x intercepts: 3, -3, -1

y intercepts: -18

$Y_1 = 2x^3 + 2x^2 - 18x - 18$

Zoom 6 Calc: Zero



GROUP NAME: Plant Science	Student Names (First and Last)
Logo:	Speaker/Presenter: Nicole Bailey
Date:_____	Writer/Prep: Josh Golub
Topics:	QC/Leader: Michael Torres

Instructions:

#4

Degree: 3

Zeros: 1, 1-i

conjugate

$(x-1)(x-(1-i))(x-(1+i))$

$(-1+i)(-1-i)$

$1+i-i-i^2$

$1-(-1)$

2

$x^2 - x - xi + i + 2$

$(x-1)(x^2-2x+2)$

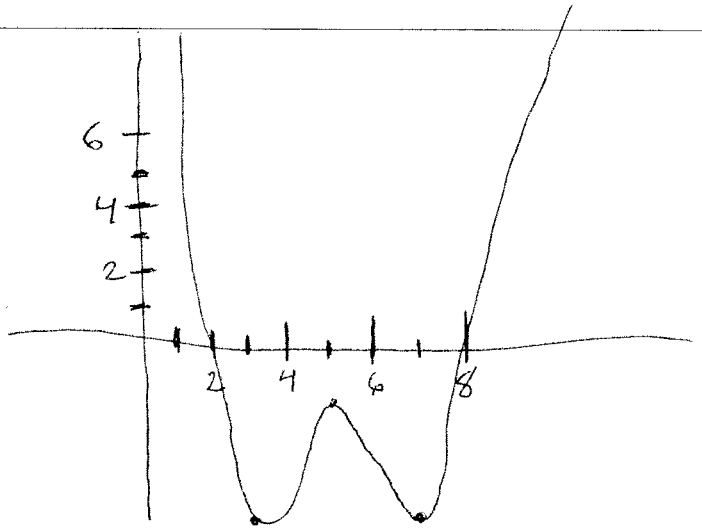
$x^3 - 2x^2 + 2x - x^2 + 2x - 2$

$\boxed{x^3 - 3x^2 + 4x - 2}$

GROUP NAME: Troy/Troy/Corn	Student Names (First and Last)
Logo:	Speaker/Presenter: Corn
Date: 3/28/13	Writer/Prep: Troy G
Topics:	QC/Leader: Troy P

Instructions:

#5



(a) The function f is increasing over which intervals? Choose all that apply

$(-\infty, 3)$ $(3,5)$ $(5,7)$ $(3,7)$ $(7,\infty)$

(b) The function f has local minima at which x-values?

3, 7

(c) What is the sign of the leading coefficient of f?

Positive Negative Not enough information (happy parabola)

(d) Which of the following is a possibility for the degree of f?

~~2~~ 3 4 5 6 7 8 9 10

4 Faces

GROUP NAME: [illegible]	Student Names (First and Last)
Logo:	Speaker/Presenter: [illegible]
Date: 02.28.19	Writer/Prep: Mallory Salay
Topics:	QC/Leader:

Instructions:

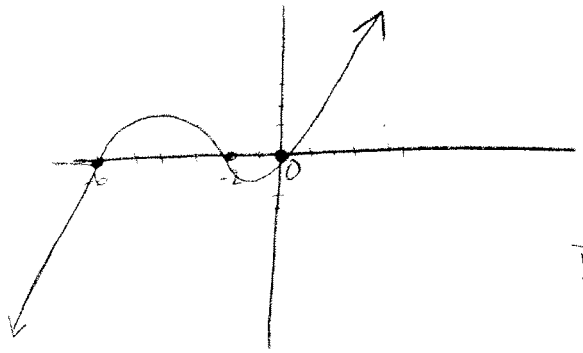
#6

$x^3 + 12x > -8x^2$

$x^3 + 8x^2 + 12x > 0$

$x(x^2 + 8x + 12) > 0$

$x(x+6)(x+2) > 0$



Disco Right

$(-6, -2) \cup (0, \infty)$

GROUP NAME: BOSS	Student Names (First and Last) Rifa 4. [redacted]
Logo: BOSS	Speaker/Presenter: [redacted]
Date: 3-28-13	Writer/Prep: Tiquan Giddens
Topics: Test 1 Review	QC/Leader: Kevin Enriquez

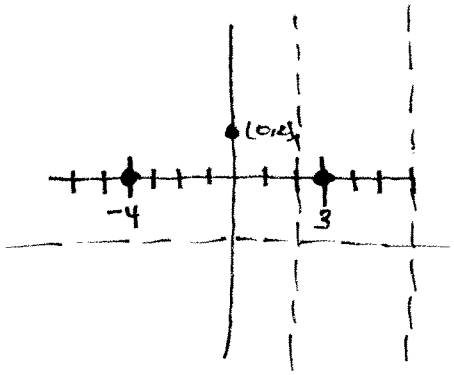
Instructions: Do → #7

Vertical Asymptote: $x=2$, $x=6$

Horizontal Asymptote: $y=-2$

X intercept: $x=3$, $x=-4$

Passes through point: $(0,2)$



Horizontal asymptote

Zeros or X intercepts

Answer: $\dfrac{-2(x-3)(x+4)}{(x-2)(x-6)}$

Vertical asymptote

GROUP NAME: Broteh	Student Names (First and Last) Rob, Bob, corn on the cob
Logo: 	Speaker/Presenter: Connor Kruysman
Date: 3/20/13	Writer/Prep: Bobby O'Connor
Topics:	QC/Leader: Robert Greysman

Instructions:

Twerk it

#8

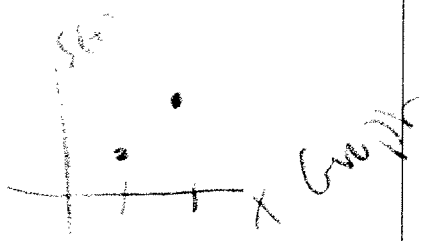
Q. what is pre-calculus?

A. The study of functions

Q. Give three small examples to describe f(x)?

A. - It can be an equation → Slope x+3

- It can be the ~~domain~~ → f(x) | x | y

- It can be a plot on a graph → 

GROUP NAME: Protein	Student Names (First and Last)
Logo: 	Speaker/Presenter: Connor Kraysman
Date: 3/21/13	Writer/Prep: Bobby O'connor
Topics:	QC/Leader: Robert Greysman

Instructions:

#9

Height	Weight
60	100
65	125

Q. Use a linear relationship to describe the average student's weight W as a function of the student's height H.

A. $w(H) = 5(h) - 200$ = Stat → Edit → Key in numbers

H	W
60	100
65	125

Stat → Over → 4: LinReg → Enter

Enter → Enter → Plug in #'s to formula

$Y = 5x - 200$

Height	weight
60	100
65	125
75	?

Q How much should a person weigh if they are 75"

A. 2nd → Graph → arrow down to 75 (x)

A. $5(75) - 200 = 175$

Q. How tall should a 200 lb student be?

A. $200 = 5(h) - 200$

$+200 \quad +200$

$\frac{400}{5} = \frac{5h}{5}$

$h = 80$" tall

A. 2nd → Graph → arrow down to 200 (Y1)

GROUP NAME:	Student Names (First and Last)
Logo:	Speaker/Presenter: Rifa Y.
Date:	Writer/Prep: Kevin Enriquez
Topics:	QC/Leader: Tiquan Giddens

Instructions:

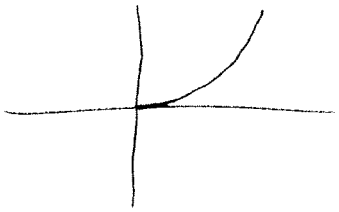
#10

10. Exponential. $w(H) = 2.132(1.06)^x$

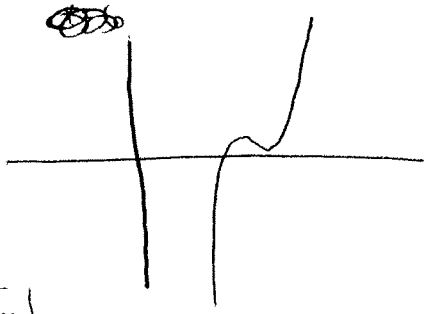
Cubic: $W(H) = .783x^3 - 142.929x^2 + 9216.905x - 197800$

x^{L1}	y^{L2}
60	100
63	140
65	125
70	200

Exponential Graph



Cubic Graph



Stat | edit | put data | Stat | > | 0: Exp Reg

Y= | vars | 1 | graph for exponential Regression

~~Stat | edit~~ | Stat | > | 6: Cubic Reg | Y= | Vars | 5: | > | > | graph

GROUP NAME: Business 3 Logo:	Student Names (First and Last) Speaker/Presenter: [illegible] Writer/Prep: Mallory Salay
Date: 03/28/16 Topics:	QC/Leader:

Instructions:

11

- Cubic regression: $W(H) = .738...h^3 - 142.93...h^2 + 9216.9...h - 197,800$

CALCULATOR:

STAT ▷ CALC #6 ENTER Y= VARS #5 ▷ ▷ EQ #1 GRAPH

to find zero:

2nd trace # 2

Left: 0
Right: 60
Guess: 60
X = 58.24...

$Y_2 = 0$

Calc 5: Intersect <enter> X3

X = 58.24...

- Quadratic regression: $.4759...x^2 - 52.566...x + 1545.3069...$

to Find minimum: STAT ▷ CALC: 3 Quad Reg

Y_1 > VARS: 1 >> EQ

Calc 3: Min.

Left: 25
Right: 60
Guess: 60
X = 55.21... Y = 939...

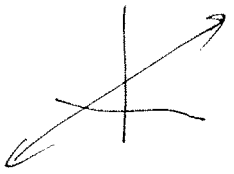
GROUP NAME: Plant Science	Student Names (First and Last)
Logo:	Speaker/Presenter: Nicole Bailey
Date:	Writer/Prep: Michael Torres
Topics:	QC/Leader: Josh Golub

Instructions:

#12

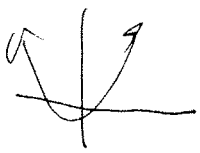
Describe the end behavior for the Linear, quadratic, and exponential regressions.

Linear: left falls right rises a=



disco Right

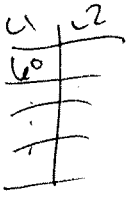
Quadratic: left rises right rises

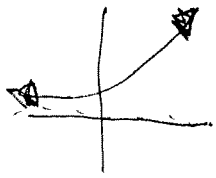


Happy Parabola

Exponential: left approaches ○ right rises

Stat Edit





Stat calc 4: Linear reg. A=9 +

Stat calc 5: Quad A=.475 +

Stat calc 0: Exp B=1.06 > 1 Growth.

GROUP NAME: Troy/Troy/corn	Student Names (First and Last)
Logo:	Speaker/Presenter: Corn
Date: 3/28/13	Writer/Prep: Troy G
Topics:	QC/Leader: Troy P

Instructions:

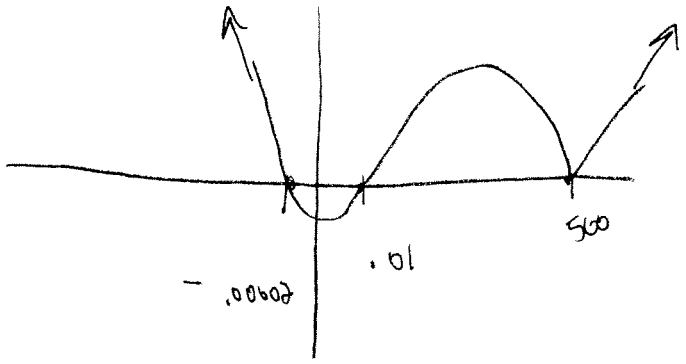
#13

13. Give a qualitative graph of the function

$$k(x) = 3(x+.00002)^3(x-500)^4(x-.01)^1$$

Pass Touch Pass

If exponent is even it is a touch on the x-axis and if it is odd, it will pass through the x-axis



So our graph passes .00002 and .01 but touches 500 and our graph is happy parabla because the lead variable is $3x^8$

GROUP NAME: Team Awesome	Student Names (First and Last)
Logo:	Speaker/Presenter:
Date: 3/28	Writer/Prep: Quay Jackson
Topics:	QC/Leader: William Smith

Instructions:

#14

$$N = \frac{-3x^2 + 120,00}{x^2 - .04} = \frac{-3(x-200)(x+200)}{(x-.3)(x+.3)}$$

Find the x intercepts: 200, -200

Give the Vertical Asymptotes: -.3, .3

Give the Horizontal Asymptote: -3

because

$y = \frac{-3}{1} = -3$ Because the degrees are the same $y = \frac{NL}{DL}$ for the horizontal asymtote