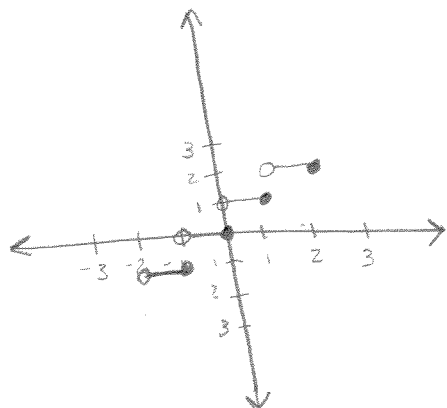


<p>GROUP NAME:</p> <p>Logo:</p>	<p>Student Names (First and Last)</p> <p>Speaker/Presenter: <u>Kevin</u></p>
<p>Date: _____</p> <p>Topics:</p>	<p>Writer/Prep: <u>Rifa</u></p> <p>QC/Leader: <u>Tigvan, Mandeeep</u></p>

Instructions:

#1



$$f(x) = \begin{cases} -1 & -2 < x \leq -1 \\ 0 & -1 < x \leq 0 \\ 1 & 0 < x \leq 1 \\ 2 & 1 < x < 2 \end{cases}$$

GROUP NAME: <u>Scientists</u>	Student Names (First and Last) <u>Kaitlin M</u>
Logo:	Speaker/Presenter: <u>Nicole P</u>
Date: <u>2/14/13</u>	Writer/Prep: <u>Sabella L</u>
Topics:	QC/Leader: <u>Alyssa B</u>

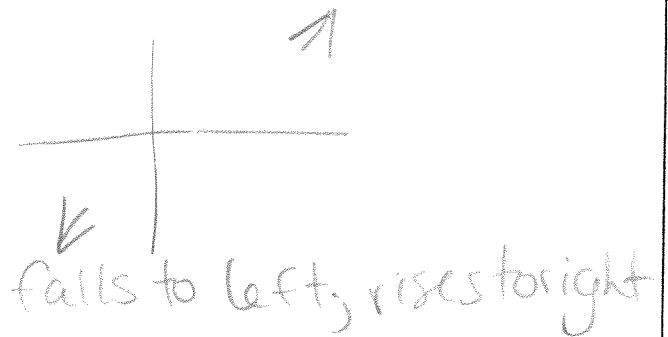
Instructions:

#2

Choose the end behavior of the graph of each polynomial function

a. $f(x) = 2x^5 + 6x^3 - 5x - 3$

degree: 5 odd - disco
leading: 2 - Right



b. $f(x) = 4x^4 - 2x^3 + 2x - 5$

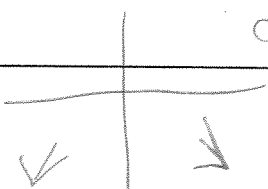
degree: 4 - parabola
leading: 4 - happy



c. $f(x) = -3x(x+1)^2(x-4)$

degree: 4 even
parabola
Sad
leading: -3

rises to left; rises to right



<p>GROUP NAME:</p> <p>Logo:</p>	<p>Student Names (First and Last)</p> <p>Speaker/Presenter: <u>Josh Golub</u></p>
<p>Date: _____</p> <p>Topics:</p>	<p>Writer/Prep: <u>Mike Rossi</u></p> <p>QC/Leader: _____</p>

Instructions:

#3

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

$$\begin{array}{r} x-3+i \\ x-3-i \\ \hline -xi \quad +xi \quad -i^2 \\ xi \quad -xi \quad -i^2 \\ \hline 9-3x \quad -3x+x^2 \\ \hline 10+x^2-6x \end{array}$$

$x^2 - 3x + xi + 3x + 9 - 3i - xi + xi - i^2$

$(x+1)(x^2 - 6x + 10)$

$x^3 - 6x^2 + 10x + x^2 - 6x + 10$

$x^3 - 5x^2 + 4x + 10$

GROUP NAME: <u>Spotted wobbegongs</u>	Student Names (First and Last)
Logo:	Speaker/Presenter: <u>Corn</u>
Date: <u>2/14/13</u>	Writer/Prep: <u>Troy G</u>
Topics:	QC/Leader: <u>Troy P</u>

Instructions:

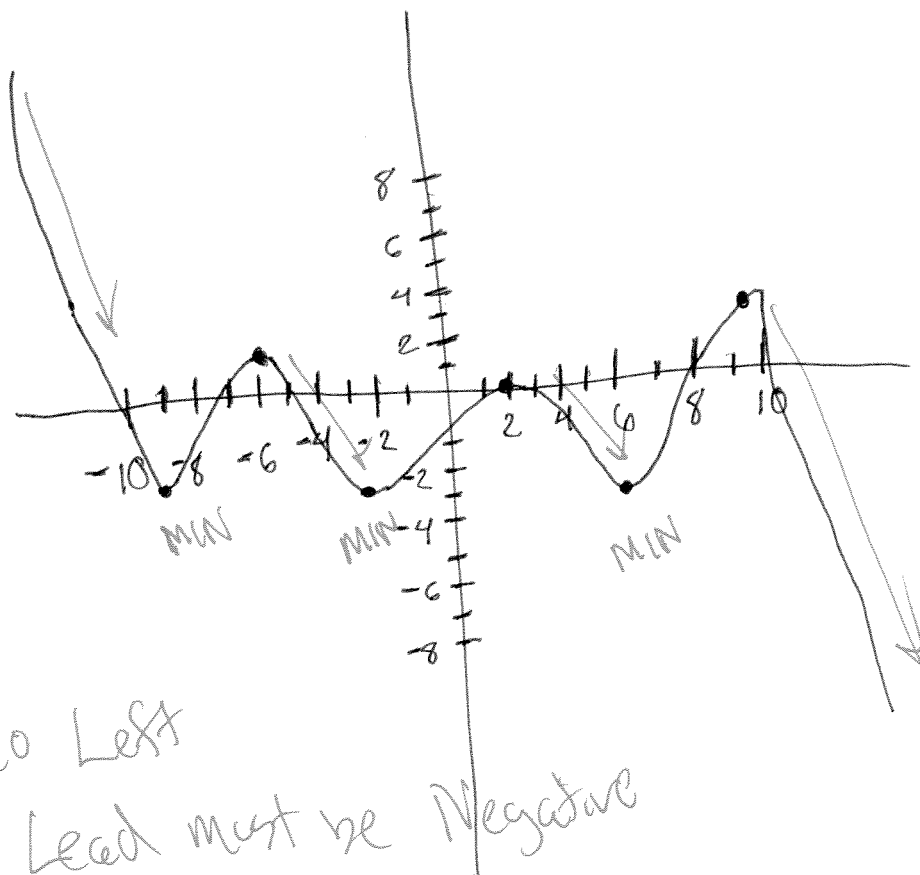
#4

A) $(-\infty, -9), (-6, -2), (2, 6), (9, \infty) \leftarrow$ Decreasing

B) $-9, 6, -3$

C) negative


D) ~~5, 7, 9~~
~~7, 9~~



Ⓒ Disco Left

Lead must be Negative

Ⓓ 7 faces \Rightarrow Degree $\geq 7, 9, 11, 13, \dots$

<p>GROUP NAME: <u>Brotein</u></p> <p>Logo: </p>	<p>Student Names (First and Last)</p> <p>Speaker/Presenter: <u>Robert Greysman</u></p>
<p>Date: <u>2/14/13</u></p> <p>Topics: <u>Pretest Question #5</u></p>	<p>Writer/Prep: <u>Bobby O'Connor</u></p> <p>QC/Leader: <u>Connor Kingsman</u></p>

Instructions:

#5

$$F(x) = -4(x-1)^2(x-3)$$

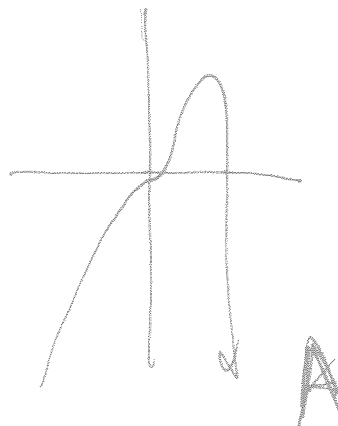
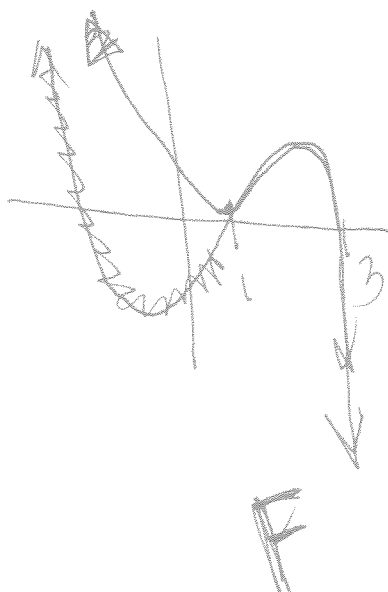
3rd degree

GRAPH F or G
zeros 1, 3 so Disc left

$$g(x) = -6x^4 + 12x^3$$

4th degree

~~G~~(x-2) GRAPH A or D
zeros 2, 0 so A
SAD PARABOLA



GROUP NAME:	Student Names (First and Last)
Logo:	Speaker/Presenter: <u>Humer Al</u>
Date: _____	Writer/Prep: <u>Shivam Singh</u>
Topics:	QC/Leader: <u>Kayla</u>

Instructions:

#6

V.A. = $x=1$ $x=5$
 H.A. = $y=0$
 No x-int. $(3, -1)$

$$\frac{a}{(x-1)(x-5)} = y$$

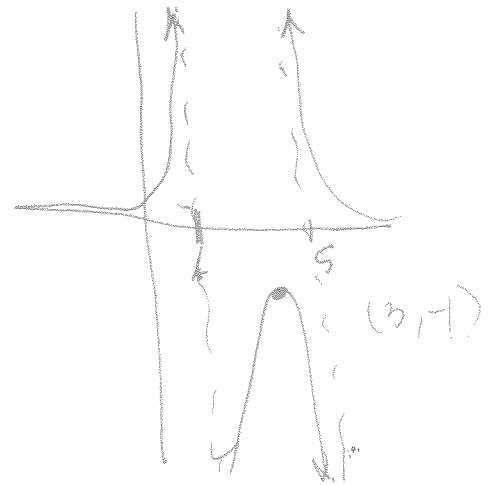
$$\frac{a}{(3-1)(3-5)} = -1$$

$$\frac{a}{2(-2)} = -1$$

$$\frac{a}{-4} = -1$$

$$a = 4$$

Ⓒ $\frac{a}{(x-c)(x-d)}$



The figure below shows the graph of a rational function f with vertical asymptotes $x=1$, $x=5$, and horizontal asymptote $y=0$. The graph does not have an x-int, and it passes through $(3, -1)$.

Choose the appropriate form, and write the equation in simplest form.

$$y = \frac{4}{(x-1)(x-5)}$$

<p>GROUP NAME: <u>B³</u></p> <p>Logo:</p>	<p>Student Names (First and Last)</p> <p>Speaker/Presenter: <u>Trey Merrill</u></p>
<p>Date: <u>02/14/13</u></p> <p>Topics:</p>	<p>Writer/Prep: <u>Mallory Salay</u></p> <p>QC/Leader: <u>Courtney [unclear]</u></p>

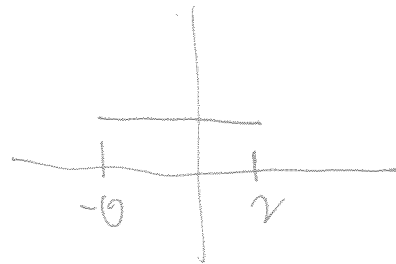
Instructions:

#7

$$\frac{x+6}{x-2} \leq 0$$

$$-6 \leq x \leq 2$$

$$y_1 = (x+6)/(x-2) \leq 0$$

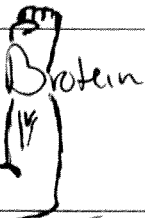


$$(-6, 2) \text{ or } [-6, 2]$$

or

$$[-6, 2)$$

GROUP NAME:



Logo:

Date:

today.

Topics:

THIS.

Student Names (First and Last)

Speaker/Presenter:

Rob

Writer/Prep:

Bob

QC/Leader:

Common the cob.

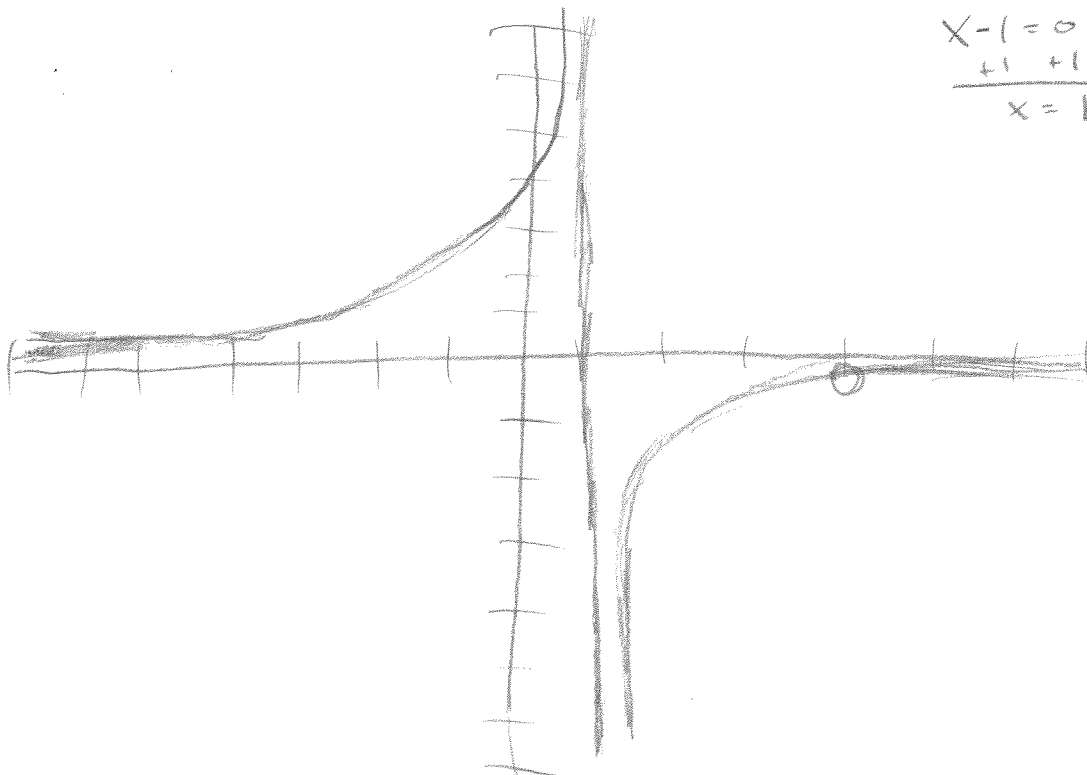
Instructions:

DO IT.

#8

$$Y_1 = (-3x + 12) / (x^2 - 5x + 4)$$

$$\frac{-3x + 12}{x^2 - 5x + 4} = \frac{-3(x/4)}{(x/4)(x-1)} = \frac{-3}{(x-1)}$$



$$\begin{array}{r} x-1=0 \\ +1 \quad +1 \\ \hline x=1 \end{array}$$

GROUP NAME: <u>Scientists</u>	Student Names (First and Last) <u>Kaitlin M</u>
Logo:	Speaker/Presenter: <u>Nicole P</u>
Date: _____	Writer/Prep: <u>Sabella C</u>
Topics:	QC/Leader: <u>Alyssa B</u>

Instructions: #9

① Precalc is the study of Functions

② Data → Equation
Regression

③ [Stat] Edit 1:

L1	L2
1	3
3	4
5	8
9	11

[STAT] → Calc 6: Cubic rpg.

$$Y = -.07 X^3 + 1.03 X^2 - 2.6 X + 4.2$$

GROUP NAME:	Student Names (First and Last)
Logo:	Speaker/Presenter: <u>Kayla</u>
Date: _____	Writer/Prep: <u>Shyam Singh</u>
Topics:	QC/Leader: <u>Huma, Ali</u>

Instructions:

#10

What is Precalculus?

Study of functions

$$y = ax^3 + bx^2 + cx + d$$

$$y = -0.07x^3 + 1.03x^2 - 2.67x + 4.71$$

$Y_1 = \text{VAR5}$ 5: (→) (→) | :

Plots on?

Zoom 9:

$$Y_2 = 5$$

Calc 5: Intersect

$$x = 3.57 \dots \quad y = 5$$

Window

Calc 5: Intersect 1st line ?

2nd line ?

Guss ?

$$x = 10.66 \quad y = 5$$

$$x = -0.06$$

Calc 2: Zero

Left 11

Right 12

Guss 12

$$x = 11.425 \dots$$

$y = \text{ans}$

GROUP NAME: 777 111	Student Names (First and Last)
Logo: 777 111	Speaker/Presenter: Shivam Singh
Date: 02/14/13	Writer/Prep: Humer Al'
Topics: Sample Practice Test	QC/Leader: Kayla James

Instructions: #10

$$y = ax^3 + bx^2 + cx + d$$

What is Precalculus?

Study of functions

$$y_1 = \text{VARS } 5 : \textcircled{>} \textcircled{>}$$

$$y = -.07x^3 + 1.03x^2 + -2.67x + 4.71$$

$$y_2 = \text{Vars } 5 : \textcircled{>} \textcircled{>} 1 :$$

Plots on?
Zoom 9:

$$y_2 = 5$$

Calc 5: Intersect

$$x = 3.57 \dots y = 5$$

Window

Calc 5: Intersect 1st curve }
2nd curve }
3rd curve }
Guess

$$x = 10.66 \quad y = 5$$

$$x = -.101 \quad y = 5$$

Calc 2: Zero

Left 11

Right 12

Guess 12

$$x = 11.425 \quad y = \text{crud}$$

<p>GROUP NAME: <u>TEAM AWESOME</u></p> <p>Logo:</p>	<p>Student Names (First and Last)</p> <p>Speaker/Presenter: <u>Quay</u></p>
<p>Date: _____</p> <p>Topics:</p>	<p>Writer/Prep: <u>SYED ZAIDI</u></p> <p>QC/Leader: <u>WILLIAM SMITH</u></p>

Instructions:

#11

$$S = \frac{100x^2 - x}{x^2 - 10,000} = \frac{100x(x - 0.1)}{(x - 100)(x + 100)}$$

DN=2
PX=2

~~horizontal = y = 100~~

Vertical = 100, -100

X intercept = 0, 0.1

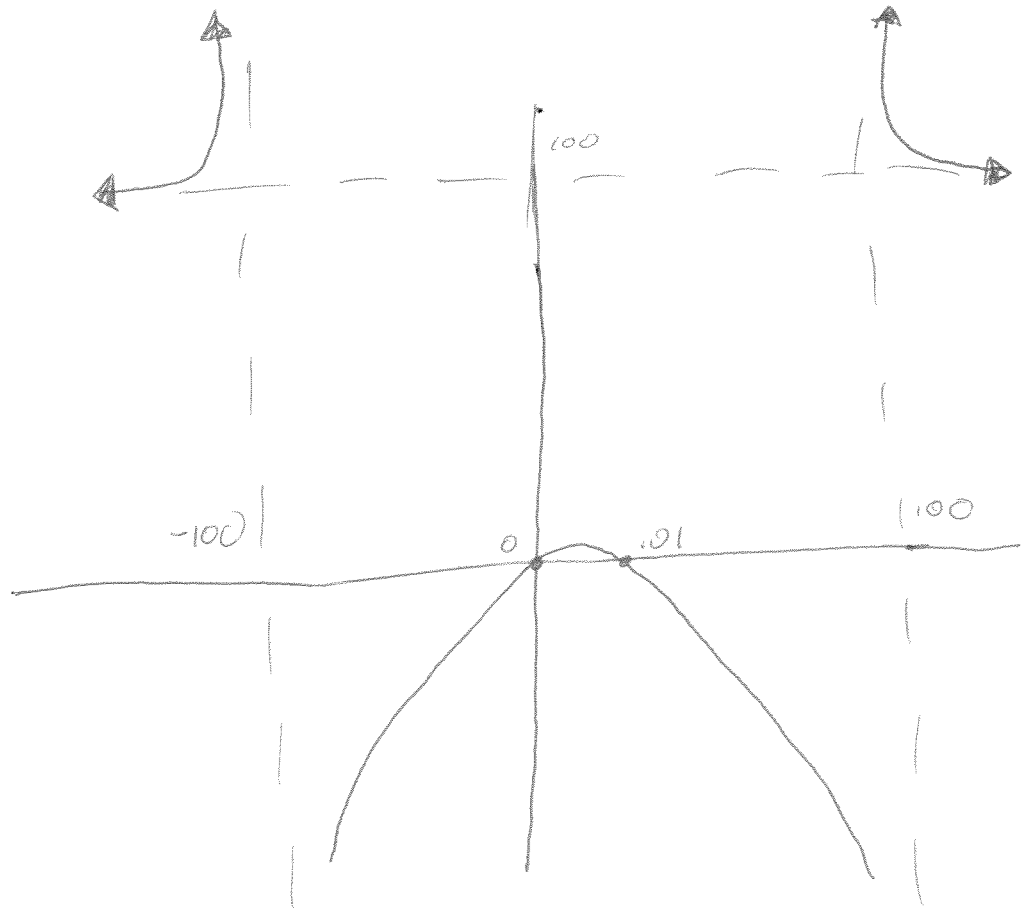
horizontal = ?

$$y > \frac{LN}{LD} = \frac{100}{1}$$

GROUP NAME: <u>Plant Science</u>	Student Names (First and Last)
Logo:	Speaker/Presenter: <u>Nicole Bailey</u>
Date: <u>2/14/2013</u>	Writer/Prep: <u>Mike Torres</u>
Topics:	QC/Leader: _____

Instructions: #12

Horizontal = 100
Vertical = 100, -100
x-intercepts = 0, 0.01



GROUP NAME: <u>Business 3</u>	Student Names (First and Last)
Logo:	Speaker/Presenter: <u>Trey Murrill</u>
Date: <u>2/14/13</u>	Writer/Prep: <u>Mallory Salay</u>
Topics:	QC/Leader: <u>Courtney Grubb</u>

Instructions:

#13/14

- touches the x-axis at 0
- crosses the x-axis at $.0000000925 (\approx 9.25 \times 10^{-8})$
- the degree is 3
- A real polynomial of degree 4 can have 4, 2, or 0 imaginary roots.

WORK:

$$R(x) = -9,250x^2(x - 9.25 \times 10^{-8})$$

Touches \nearrow Pass \nearrow
 ZN: 00 and 9.25×10^{-8}

DN > DD so it has slant asymptotes

$$\frac{LN}{LD} = \frac{-9,250}{1} = \text{Negative left}$$

$$DN - DD = 3 - 0 = 3 \text{ ODD DISCO}$$

No vertical asymptotes
 horizontal asymptotes: $y = ZN$
 $\hookrightarrow y = 0$ and $y = 9.25 \times 10^{-8}$

touches at $(0,0)$
 & crosses at $(9.25 \times 10^{-8}, 0)$

