Similarities and differences in the graphs of degree 1 polynomials.

TERENCE TAO

All three lines are touching the x-axis and y-axis once. Not all of them have the same slopes.

WEN TSUN WU

The similarities of the graphs is that all the lines are straight and the differences is that the positive equations are on the negative side of the x-axis and negative equations go across the positive lines.

HANNAH FRY

All the degree 1 polynomials cause the graph to present straight lines. In opposition, these graphs contain different slopes and intercepts.

EUPHEMIA LOFTON HAYES

One similarity they all have is that, they're all straight lines. They also cross the x and y axis one time each. However they all contain different y and x intercepts, slopes, and depending on the polynomial, they may or may not cross each other.

FRANCES KIRWAN

Similarities include all functions with the degree of 1 or below to form straight lines Differences include the slope and the X & y intercepts

HEE OH

Similarities- all functions with the degree of 1 below form straight lines. Differences- slopes and x,y intercepts

DORIS SCHATTSCHNEIDER

Similarities: linear, cross x & y axis Differences: y, x intercept point

JEAN SPRINGER

All three lines touch both the x and y axis once. The difference is that they all hit the lines in different spots according to the equation.

DOROTHY VAUGHN

The major similarity between all degree 1 polynomials is that they are linear graphs. All are in y=mx + b form. The differences between degree 1 polynomials is they might have differing slopes,and different x any y intercepts.

RENÉ DESCARTES

The similarities that they all have is that they all cross the x axis and they are all straight lines. Differences are that not all of them have a positive slope (have different slopes) and not all of them cross the x axis at the same point.

SRINIVASA RAMANUJAN

the graphs are all linear thus they cross the y and x axis once. since there are multiple of graphs, intersections will occur. the difference between the graphs are the intersecting points.

DIOPHANTUS

The similarity between all degree one polynomials is that they are linear graphs. The difference between the polynomials is that they may have different slopes and x and y intercepts.

JEAN D'ALEMBERT

they are all linear since the degree is 1. When the leading coefficient is positive the lines go from quadrant 3 to quadrant 1, and when it is negative the lines go from quadrant 4 to 2. They all have different intercepts. They all have a x and y intercept. All in y=mx+b.

AUGUSTIN CAUCHY

Similarities: all straight lines and none of them are curved Differences: y intercept, x intercept, and slope

ATLE SELBERG

The degree makes the graph linear. If the leading coefficients is positive it goes from quadrant III to quadrant I. If the leading coefficient was negative, then it would go from quadrant II to IV. They all cross the X-intercept at different places, thus they all have different zeros. They also all touch the Y and X intercepts and have different slopes.

ALFRED TARSKI

Differences: translation in the y axis or the x axis and change of slope Similarities: all straight lines

HERMANN GRASSMANN

They all cross the x axis. All the lines are linear. They all cross the x axis at different points. They all have a different slopes.

STEFAN BANACH

similarities: they are all straight lines, they are all monomial, same directions, across the x axis and y axis differences: they tilted to different angles

JACOB BERNOULLI

Similarities they are all straight line,they are all monomial, across with X axis and Y axis Differences the number across x axis is different

ANDRÉ WEIL

The similarities in the graph are that all lines are linear and cross the x-axis. A difference is that they all pass a different point on the x-axis.

CATHLEEN MORAWETZ

all the lines cross the x axis and they are all lines. they all have different intercepts and slope.

JOAN BERMIN

the similarities in the graphs is that they cross eachother and that they all represent the slop of a lune

DAVID BLACKWELL

The graphs of the degree 1 polynomials are similar. They are all graphed as straight lines. For degree 1 polynomials, the first term is the change in the y-axis. The second term is the y-intercept.

RUTH GONZALES

the similarities is that they usually cross eachother and that they have straight line going across the graph. The difference is that they have diff number of term of the polynomials.

Similarities and differences in the graphs of degree 2 polynomials.

TERENCE TAO

The similarity between all of these degree two polynomials is that they're all parabolas, they all opens up, and they're all minimums. The difference between the polynomials is that they have different curves and x and y- intercepts.

WEN TSUN WU

Similarities: they are parabolas Differences: the width of the parabolas can change depending on the number in front of the x.

HANNAH FRY

Similarities are that all these graphs are parables. Differences are that they have different vertexes, intercepts, and openings/slopes depending on the leading coefficient.

EUPHEMIA LOFTON HAYES

Similarities: They are all parabolas, the more you go up the graph the wider the parabolas are. Differences: They all have different parabolas and some parabolas may not even touch the y or x axis depending on your polynomial.

FRANCES KIRWAN

Similarities- they all create parabolas Differences- all parabolas are different, vertex, the slope and intercepts

HEE OH

Similarities - it's a PARABOLA Differences - vertex, intercepts, direction if leading coefficient is negative

DORIS SCHATTSCHNEIDER

Similarities: All are parabolas, curved lines Differences: Vertex, points of intercept, slope

JEAN SPRINGER

Similarities between degree 2 polynomials is that they are all parabolas. Some differences between degree 2 polynomials is that some open up as a maximum and others will open up as a minimum.

DOROTHY VAUGHN

The similarity between all degree 2 polynomials is that they are quadratics, form parabolas on graphs, there is no inflection point, and go on forever, unless the domain is restricted. The major differences are different quadratic equations have different vertices, different slopes, different zeroes, and different y-intercepts.

RENÉ DESCARTES

They are all positive parabolas, all cross the y intercept once, and the x intercept twice. The differences are that they don't cross the x or y axis on the same points and their vertex's are different (not all of them are on the y-intercept)

SRINIVASA RAMANUJAN

All the polynomials of degree 2 are considered a parabola. many changes can take place for example: once a negative is placed in the leading coefficient the parabola is flipped upside down. the leading coefficient determines the width of the parabola and the last digit determines the position of the graph's point in the y axis.

DIOPHANTUS

All degree two polynomials are quadratics rather than exponential and are present as parabolas on a graph. The have different vertices, slopes, zeroes as well as x and y intercepts.

JEAN D'ALEMBERT

Since the degree was 2 the lines were all parabolas. They all eventually cross and intercept. When when the leading coefficient is negative the parabola is reflected. They all have different slopes. All have a different vertex.

AUGUSTIN CAUCHY

similarities: they're all parabolas, positive parabolas all face upward, they all go on forever differences: different vertices, some of them don't have x intercepts, different y intercepts

ATLE SELBERG

When they have a degree of 2, it is a parabola. Negatives in the leading coefficient reflects the graph in the x-axis. When the horizontal stretch is negative then it is reflected in the x-axis.They all cross an intercept because it is exponential.

ALFRED TARSKI

Differences: Translation of vertices, slope, different x and y intercepts. Similarities:Parabolas

HERMANN GRASSMANN

They all cross the x and y axis. They all are parabolas. One of the parabolas are negative. One of the vertex's is not on the the y-intercept.

STEFAN BANACH

similarities: facing up, symmetrical, the vertex are all on y axis differences: different vertex number, one cross the y axis, one didn't reach the y axis and one is on the 0 point

JACOB BERNOULLI

Similarities they are on the Y axis Difference the number across Y axis is different

ANDRÉ WEIL

A similarity is that all parabola's pass through the y-axis but not all vertex's are on the y-axis.

CATHLEEN MORAWETZ

they are all parabolas and they have different intercepts, vertex and slopes

DAVID BLACKWELL

The graph of the degree 2 polynomials are curved lines shaped like a "U". The first term in the degree 2 polynomial is determines the stretch, the sigh of this term changes where the "U" faces. Up or down. The last term is still the y-intercept.

RUTH GONZALES

difference: all 3 have difference slope similarities: all 3 make a parables

Similarities and differences in the graphs of degree 3 polynomials.

TERENCE TAO

The similarity between all of these degree three polynomials is that they all touch the x/y-axis once. The difference between these degree three polynomials is that they have different curves and intercepts.

HANNAH FRY

They are all cubic. Are different in the intercepts and the inflection points.

EUPHEMIA LOFTON HAYES

Similarities: They all curve at a certain point. They also go away from the y axis. Differences: Some may curve more than once depending on your polynomial equation.

FRANCES KIRWAN

Similarities include no minimum, maximum and go off to infinity Differences- x & y Intercepts, points of refection

HEE OH

Similarities - no maximum or minimum, infinity Differences - Intercepts, points of inflection,

DORIS SCHATTSCHNEIDER

Similarities: Two curves within line, cross y & x axis Differences: X & y intercept, slopes

JEAN SPRINGER

In degree 3 polynomials, similarities can include lines hitting both the x and y axis. Differences can include the curve in the lines hitting the y axis at different points on the graph.

DOROTHY VAUGHN

All degree 3 polynomials are similar have x and y intercepts, they continue on forever, and they all have inflection points. They are different because they have different slopes, different stretch factors, and different intercepts.

RENÉ DESCARTES

The similarities are that they are shaped like an S and all go through the same point on the y axis and go through the x axis, but at different points.

SRINIVASA RAMANUJAN

The graphs have vertical asymptotes with different slopes and intersecting points of the y and x axis

DIOPHANTUS

All degree three polynomials are cubic graphs, have similar inflection points that continue towards infinity and have translations in both the y and x axis. All degree three polynomials have different x and y intercepts and stretch factors.

JEAN D'ALEMBERT

The max and min go on towards infinity. All have a degree of 3. There will always be x and y intercepts. They are cubic graphs. All have different intercepts.

AUGUSTIN CAUCHY

Similarities: inflection points or max and min points, all go on forever Differences: y intercepts, some have no x intercepts, negatives have a maximum and minimum, positives have an inflection point, stretch factor

ATLE SELBERG

The maximum and minimum points go up towards infinity. They will always cross the X and Y intercepts.

ALFRED TARSKI

Differences: Translations in x and y, stretch factors, max and min, x and y intercepts Similarities: Cubic graphs, prominent inflection point.

HERMANN GRASSMANN

They all go through the x and y axis. They go through the intercepts at different points.

STEFAN BANACH

similarities: cross the x and y axis, the bigger number with degree 2 and 1, the bigger inflection in the graph differences: the inflection is different.

JACOB BERNOULLI

Similarities they are on the Y axis ,across the x and y axis, the number affect inflection Differences the number on the x axis is different

ANDRÉ WEIL

They all have different inflection points, has a maximum and minimum point going up towards infinity. They will always cross the X and Y intercepts.

CATHLEEN MORAWETZ

they all have flexion , a minimum, a maximum. they have different intercepts and how they flex

DAVID BLACKWELL

The

Similarities and differences in the graphs of degree 4 polynomials.

TERENCE TAO

The similarity between all of these degree four polynomials is that they all touch the x-axis once. The difference between all of these degree four polynomial is that not all of them touches the y-axis.

HANNAH FRY

Similar: Parabola, slow growth (max/min) Differences: Vertex, intercepts, how they bend near near the vertex

EUPHEMIA LOFTON HAYES

Similarities: They are all parabolas, they also slowly inching away from the y axis Differences: They don't all bend the same near the vertex, some may be flat and some may change directions of the parabola. Depending if you have a negative or not, you might have a minimum or maximum point.

FRANCES KIRWAN

Similarities include they are all quartics, with minimums and maximum points and have verticies Differences include different y intercepts and x intercepts, they all bend differently

HEE OH

Similarities - maximum, minimum, all have a vertex Differences - different intercepts

DORIS SCHATTSCHNEIDER

Similarities: asymmetrical parabolas w/ two curves on one side Differences: Slopes, intercepts

JEAN SPRINGER

Similarities are that they all touch the y axis. Differences are that they all have different shapes, some will curve below the vertex and others will stay as a slope.

DOROTHY VAUGHN

All degree 4 polynomials have y-intercepts, but vary in value, and all continue on forever. However, they have different stretch factors, different slopes, are not symmetrical, different minimum points, and vertices.

RENÉ DESCARTES

They all go through the y axis, but all of them don't go through the x axis. Some differences are that they don't go through the same point on the y axis and only two cross the x axis

SRINIVASA RAMANUJAN

the graphs are similar to a parabola however the bottom curve can be altered.

DIOPHANTUS

Degree four polynomials all have y intercepts that continue towards infinity. They differ in vertices, stretch factors, slopes, minimum points and are not symmetrical.

JEAN D'ALEMBERT

They all create a w or m shape. Have 2 minimums or maximums. All quartics. They all have an intercept. They have different slopes. They aren't always symmetrical. #mathislit

AUGUSTIN CAUCHY

Similarities: they are all quartics, have minimums and maximum points, have verticies Differences: different y intercepts and x intercepts, they all bend differently

ATLE SELBERG

They create a small W or M shape and have two minimums or maximums.They all cross the X and Y axis. They are not always symmetrical and have a different vertex.

ALFRED TARSKI

Differences: different number of and position of x/y intercepts. stretch factors create bumps. Similarities: quadratic graphs with significant minimums and maximums

HERMANN GRASSMANN

They all cross the y-intercept. One polynomial does not cross the x-intercept.

ANDRÉ WEIL

Graphs are different shapes. When you add different degrees you get a variation of points. They don't all touch the x-axis.

CATHLEEN MORAWETZ

they bend differently and have different vertex and intercepts. they all are parabolas

Similarities and differences in the graphs of degree 5 polynomials.

TERENCE TAO

The similarity between all of these degree five polynomials is that they all touch the x-axis at least once. The difference between all of these degree five polynomials is that they all have different slopes, curves, x and y- intercepts.

HANNAH FRY

Similar: They are all quintic Differences: Intercepts, inflections positions

EUPHEMIA LOFTON HAYES

Similarity: They are all curved up and down, and are all quintic equations, moving away from y axis. Differences: They have different max and min points, depending on equation, may cross the x and y axis multiple times.

DORIS SCHATTSCHNEIDER

Similarities: have two curves in graph, similar to degree 3 polynomials Differences: slopes, points of intercept

JEAN SPRINGER

In degree 5 polynomials, the lines hit both the x and y axis and have curving in the lines. The difference is that the lines curve in different places on the x and y axis.

DOROTHY VAUGHN

All degree 5 polynomials are quintic equations, they all have inflection points, and they all have x and y intercepts, but they vary in magnitude. They are different because they all have different slopes and different minimum/maximum points.

SRINIVASA RAMANUJAN

the graphs all have it's individual asymptote and a curve. the slope and intersections differ from the graphs.

DIOPHANTUS

Degree five polynomials are all quintic graphs. However, they all have different intercepts and inflection points.

JEAN D'ALEMBERT

They are all quintic graphs. All have an intercept. Different intercepts and inflection points. #ig:@yamcash

AUGUSTIN CAUCHY

Similarities: inflection points, all go on forever, max and min points, they're all quintics Differences: different x and y points, different stretch factors

ATLE SELBERG

They all cross the X and Y intercept and inflection points. Similar to cubic graphs. All are quintic graphs.

ALFRED TARSKI

Differences: More extreme stretch factors, translations in x/y axis, number of x intercepts Similarities: Quintic graphs, similar to cubic graph with prominent inflection point

CATHLEEN MORAWETZ

all go on forever. diffrences are the intercepts and inflection point