Mathematics Class Slides

Bronx Early College Academy

Chris Huson

2 January - 20 January 2019

5.2 Drui: Exponent rules, Monday Jan 7

5.3 Drui: Laptop, Deltamath, Desmos /Word. Tuesday Jan 8

5.4 Drui: Regents exponent & exponential function problems, Wednesday Jan 9

5.6 Drui: Regents exponent & exponential function problems, Monday Jan 14

5.7 Drui: Regents polynomial problems, Tuesday Jan 15

5.8 Drui: Polynomial remainder theorem, Wednesday Jan 16

5.9 Drui: Polynomial remainder theorem, Thursday Jan 17

5.10 Drui: Deltamath Polynomials, Tuesday Jan 28

GQ: How do we manipulate exponential expressions?

CCSS: HSF.IF.C.7 Analyze functions 5.2 Monday Jan 7

Do Now: Exponents handout (Regents formula sheet)

Exponent operations, imaginary numbers, exponential function applictions

Homework: Regents questions review

How do we communicate mathematical results?

CCSS: MP.4 Model with mathematics 5.3 Tuesday Jan 8

Technical skills needed to communicate mathematics

1. Word processing: Microsoft Word and equation editor
2. Computer calculators: Desmos; domain restriction, labeling
3. Cloud storage: Dropbox
4. Technical writing standards: MLA format (Purdue OWL)
5. Writing style: declarative
6. Assessment criteria: IB exploration criterion *B: Mathematics Presentation*

Deltamath exponential practice. Homework: complete Deltamath
Makeup: Rewrite Quadratics paper, using model as guide

GQ: How do we manipulate exponential expressions?

CCSS: HSF.IF.C.7 Analyze functions 5.4 Wednesday Jan 9

Do Now: Exponents handout (Regents problems)

Exponent operations, imaginary numbers, exponential function applictions

Homework: Regents questions review

GQ: How do we manipulate exponential expressions?

CCSS: HSF.IF.C.7 Analyze functions 5.6 Monday Jan 14

Do Now: Exponents handout (Regents problems)

Exponent operations, imaginary numbers, exponential function applictions

Homework: Test corrections

GQ: How do we understand polynomial expressions?

CCSS: HSF.IF.C.7 Analyze functions 5.7 Tuesday Jan 15

Do Now: Regents problems

1. Express $\sqrt[5]{x^3}$ as a single term with a rational exponent.
2. Find h and k: $3x^3 + (2x - 3)^2 = hx^3 + 4x^2 + kx + 9$
3. Explain how $4^{-\frac{3}{2}}$ can be written equivalently as $\frac{1}{8}$

Polynomial functions, graphs, factoring

Homework: Complete classwork problem set

GQ: How do we evaluate polynomial expressions?

CCSS: HSF.IF.C.7 Analyze functions

5.8 Wednesday Jan 16

Do Now: Regents problems

1. Find h and k: $5x^3 + (x+3)^2 = hx^3 + x^2 + kx + 9$
2. Explain how $(3^{\frac{1}{2}})^3$ can be written equivalently as $\sqrt{27}$
3. Sketch the function $f(x) = (x+1)(x-1)(x-4)$.

Review test corrections
Polynomial graphs, factoring, remainder theorem

Homework: Complete classwork problem set

GQ: How do we evaluate polynomial expressions?

CCSS: HSF.IF.C.7 Analyze functions 5.9 Thursday Jan 17

Do Now: Regents problems

1. Explain how $(3^{\frac{1}{2}})^3$ can be written equivalently as $\sqrt{27}$
2. Sketch the function $f(x) = x(x+2)(x-4)$.
3. Given $f(x) = (x+4)(x+2)(x-4)$, find $f(4)$.

Review test corrections
Polynomial graphs, factoring, remainder theorem

Homework: Review your notes up until the Regents exam. Good luck!

GQ: How do we evaluate polynomial expressions?

CCSS: HSF.IF.C.7 Analyze functions 5.10 Tuesday Jan 28

Do Now: Regents preview

1. Results and reflection

Deltamath problem set
Polynomial graphs, factoring, remainder theorem

Homework: Complete Deltamath problem set