

## 11.1 IB Math - Unit 8 Descriptive Statistics

Bronx Early College Academy

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6 May 2019

10.1 Exponential function & applications Tuesday 28 May

10.2 Polynomials introduction Wednesday 29 May

10.3 Polynomial zeros & graphs Thursday 30 May

10.4 Polynomial zeros & graphs Wednesday 5 June

10.5 Polynomial zeros & graphs Monday 10 June

10.6 Polynomial zeros & graphs Tuesday 11 June

10.7 Polynomial zeros & graphs Wednesday 12 June

## GQ: How do we apply geometric growth to situations?

CCSS: HSG.CO.D.12 Congruence, geometric constructions

10.1 Tuesday 28 May

### Do Now: Handout

1. Using scale factors
2. Real world situations

Guest teacher, Mr. Segal. Applications of exponential functions in finance.

Homework: Problem set, test corrections due Thursday

## GQ: How do we work with polynomial functions?

CCSS: HSG.CO.D.12 Congruence, geometric constructions 10.2 Wednesday 29 May

Do Now: Solve for the relevant parameters,  $j$ ,  $k$ , etc.

1.  $2x^2 + 7 = 2x^2 + j$

2.  $kx^2 + 5x + 4 = 3x^2 + mx + 4$

3.  $x^3 + x^2 + 5x + 4 = (x + 1)(x^2 + nx + 4) + p$

Polynomial functions

Homework: Problem set, test corrections due tomorrow

## GQ: How do we work with polynomial functions?

CCSS: HSG.CO.D.12 Congruence, geometric constructions

10.3 Thursday 30 May

Do Now: Solve for the relevant parameters,  $j$ ,  $k$ , etc.

1.  $2x^2 + 7 = 2x^2 + j$

2.  $kx^2 + 5x + 4 = 3x^2 + mx + 4$

3.  $x^3 + 3x^2 + 6x + 8 = (x + 1)(x^2 + nx + 4) + p$

Polynomial functions

Homework: Problem set, test corrections due

Reminder: Regents review at Melrose Library 9:00-10:30 Monday

## GQ: How do we work with polynomial functions?

CCSS: HSG.CO.D.12 Congruence, geometric constructions 10.4 Wednesday 5 June

Do Now: Given the function  $f(x) = x^3 - 3x^2 - x + 3$

1. Sketch  $f$ . Mark the intercepts and extrema (local max, min)
2. Write  $f(x)$  in factored form.
3. Characterize its *end behavior*
4. Mark its increasing/decreasing behavior on an axis using plusses and minusus

Review homework

Polynomial functions

Homework: Problem set

Reminder: Last day for work in this marking period is Friday

## GQ: How do we work with polynomial functions?

CCSS: HSG.CO.D.12 Congruence, geometric constructions

10.5 Monday 10 June

Do Now: Solve for the relevant parameters,  $j$ ,  $k$ , etc.

1.  $(x - 3)^2 + 7 = x^2 - jx + k$
2.  $(x + 4)(x^2 + 2x + 1) = x^3 + jx^2 + kx + 4$
3. Write down the initial value and half life of the function,

$$f(t) = 112 \left( \frac{1}{2} \right)^{\frac{t}{12}}.$$

Polynomial functions

Homework: Problem set

## GQ: How do we work with polynomial functions?

CCSS: HSG.CO.D.12 Congruence, geometric constructions

10.6 Tuesday 11 June

### Do Now: Exponential graphing problem

1. Accuracy when graphing
2. Converting the base given a parameter in the exponent

Polynomial functions

Homework: Problem set



## GQ: How do we work with polynomial functions?

CCSS: HSG.CO.D.12 Congruence, geometric constructions 10.7 Wednesday 12 June

### Classwork handout: Algebra 2 Regents problem

1. Graphing polynomials, particularly using their zeros
2. Fractional exponents, manipulation
3. Converting the base given a parameter in the exponent
4. Complex calculator formulas
5. Polynomial long division

Homework review

Homework: Prior Regents exams handout