# 11.1 IB Math - Unit 8 Descriptive Statistics Bronx Early College Academy

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6 May 2019

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 $\ensuremath{\mathsf{BECA}}\xspace /$  Dr. Huson / 11.1 IB Math - Unit 8 Descriptive Statistics

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

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