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

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