

Polynomial Models

Hurricanes are recurring threats to the densely populated US coast. Post-tropical storm Sandy was an example of their devastating effects. Sandy destroyed properties worth billions of dollars including the historical pier in New Jersey. So scientists use the behavior of the atmosphere which is governed by physical laws which can be expressed as mathematical models. These models represent how atmospheric quantities such as temperature, wind speed and direction, humidity, etc., will change from their initial current values to the latter values (i.e. when they hit the coasts). If we can solve these equations, we will have a forecast.

Directions:

You will turn in an essay (five (5) paragraph minimum; five sentences each) about **the use of Polynomial models in the real world** (print two-sided if necessary).

For this project, your essay must also include at least **one** (1) **graph** of a polynomial model. Thirty (30) percent of your grade will be based on the accuracy of your description of polynomial models.

Written Portion: (Must be typed)

Objectives: Students will be able to:

1. Write an introductory paragraph about polynomial models
2. Write a paragraph about **polynomials** in the Social Sciences (Economics, Government, etc.)
3. Expand the previous paragraph or write a new paragraph about **polynomials** in the Natural Sciences (chemistry, physics, etc.)
4. Expand the previous paragraph or write a new paragraph
5. Write a summary/conclusion about the use of polynomial models

Grading Criteria:

You will receive an "A" credit grade for this essay. See Rubric below:

Rubric

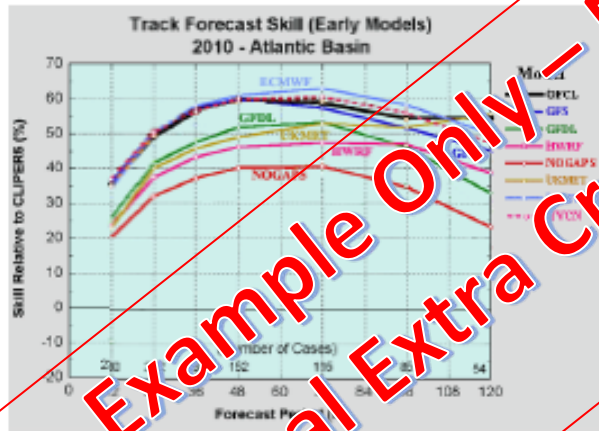
Paragraphs/Requirement	Points
Introduction	10
Paragraph (Social or Natural Science example)	20
Continuation or new Social or Natural Science example	20
Graph of a Polynomial	20
Continuation or new Social or Natural Science example	20
Summary of Polynomial Models	10
TOTAL	100

Polynomial Models

Algebra II Honors

Name _____
Date _____
Period _____

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GOOD LUCK 😊