

Mathematics Class Slides

Bronx Early College Academy

Chris Huson

5 December 2018

GQ: How does a function's graph relate to its derivatives?

CCSS: HSF.IF.B.4 Interpret features of functions and their graphs 4b.1 Wednesday Dec 5

Do Now: Differential calculus

1. Take the 1st & 2nd derivatives of $f(x) = x^3 - 6x^2 + 8x$.
2. Sketch the function.

Challenge: Identify key features, graphically & algebraically.

Lesson: Function graphs, extrema, the 1st & 2nd derivative tests
p. 233- 240

Homework: Textbook exercises 7T p. 239

GQ: How does a function's graph relate to its derivatives?

CCSS: HSF.IF.B.4 Interpret features of functions and their graphs 4b.2 Thursday Dec 6

Do Now: Vector review, handout

Lesson: 7.7 Function graphs, extrema at endpoints p. 240-244
Graphing exercises 7U p. 240

Homework: Textbook exercises 7V & 7W p. 242-4

GQ: How do use calculus to optimize a situation?

CCSS: HSF.IF.B.4 Interpret features of functions and their graphs 4b.3 Friday Dec 7

Do Now: Vector & derivatives review, handout

Lesson: 7X Optimization problems p. 244-247

Assessment: Pop quiz covering Do Now problems

Homework: IB problem set

GQ: How does a function's graph relate to its derivatives?

CCSS: HSF.IF.B.4 Interpret features of functions and their graphs 4b.4 Monday Dec 10

Do Now: Vector & derivatives review, handout

Lesson: 7Y Optimization problems p. 244-247

Application problems

Test Thursday

Homework: Textbook exercises 7Y p. 248