UNIT 1 - LESSON PLANS

Class PreCalculus Topic Analyzing Graphs of Functions and Relations Lesson 2 Of 1

Students will:

Objective

 Analyze graphs of functions and relations (x and y – intercepts, zeros, symmetry, even and odd functions)

"I Can" Statement

I can analyze graphs of functions and relations (x and y – intercepts, zeros, symmetry, even and odd functions)

CCSS.MATH.CONTENT.HSF.IF.C.7.A

Graph linear and quadratic functions and show intercepts, maxima, and minima.

CCSS.MATH.CONTENT.HSF.IF.C.7.B

 $\label{eq:Graph square root, cube root, and piecewise-defined functions, including step} % \[\mathcal{L}_{\mathcal{L}_{\mathcal{L}}} = \mathcal{L}_{\mathcal{L}_{\mathcal{L}_{\mathcal{L}}}} = \mathcal{L}_{\mathcal{L}_{\mathcal{L}_{\mathcal{L}}}} = \mathcal{L}_{\mathcal{L}_{\mathcal{L}_{\mathcal{L}}}} = \mathcal{L}_{\mathcal{L$

functions and absolute value functions. CCSS.MATH.CONTENT.HSF.IF.C.7.C

Graph polynomial functions, identifying zeros when suitable factorizations are

available, and showing end behavior. CCSS.MATH.CONTENT.HSF.IF.C.7.D

(+) Graph rational functions, identifying zeros and asymptotes when suitable

factorizations are available, and showing end behavior.

Common Core Standards

CCSS.MATH.CONTENT.HSF.IF.C.8

Write a function defined by an expression in different but equivalent forms to

reveal and explain different properties of the function.

CCSS.MATH.CONTENT.HSF.IF.C.8.A

Use the process of factoring and completing the square in a quadratic function to show zeros, extreme values, and symmetry of the graph, and interpret these

in terms of a context.

CCSS.MATH.CONTENT.HSF.IF.B.4

For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity.*

Bell Work

See 1-2 Bell work

Procedures

- 1. Start and lead student discussion related to the bell work.
- 2. Distribute the Guided Notes
- 3. Present lesson or play a video lesson.
- 4. Use an Online Activity if time permitted.

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5. Distribute Lesson Assignment.

Bell Work 1-2 **Assessment** Assignment 1-2

Exit Quiz 1-2

Additional Resources See Online Activities