

Unit 3: Introduction To Functions

Purpose of the Unit: Students will identify common functions and analyze their graphs.

Prerequisites: Basic operations with real numbers, simplifying expressions, graphing equations

Daily Lesson Guide

Day	Lesson Content and Objectives	Focus Questions	Critical Thinking (High Yield / Literacy /LTF/etc.)	Engagement	Assessment and/or Accommodations
1	C.1.d F.1F2	What is the difference between a relation and a function? How do I find the domain and range of a function? How do I use function notation?	Math Notes	ACT Bellringer	Formative assessment through guided practice Page 64: 1-24

2	C.1.d F.BF.2	How do I model data using functions?	Math Notes Collaborative group work using 2.1 Think About a Plan	ACT Bellringer	Definitions Quiz Formative assessment through monitoring of group work "Why" Boxes Page 65: 25-33
3	C.1.d F.1F.1 F.1F.2	Same as Days 1 and 2	Think-Pair-Share	ACT Bellringer	Formative assessment through ME, ME, ME! Monitoring of student work Practice 2.1 Form G
4	F.1F.4	How do I determine if a relation expressed as a table, order pairs, equation, or graph is a function?	Math Notes Independent Work	ACT Bellringer	Formative assessment through monitoring of group work Questioning Techniques Page 239: 1-24 (Pre-AP Book)
5	F.1F.1	How do I state the domain and range of relations and functions? How do I determine if a relation is a function?	Collaborative Group Work	ACT Bellringer	Formative assessment through ME, ME, ME! Monitoring of student groups Domain/Range Worksheet

6	F.1F.4	How do I identify the type of function given an equation or a graph?	Math Notes	ACT Bellringer	Formative assessment through guided practice Special Functions Worksheet #1
7	F.1F.4	Same as Day 6	Collaborative Group Work using Determining Functions Worksheet	ACT Bellringer	Formative assessment through monitoring student groups Special Functions Worksheet #2
8	F.1F.4	How do I determine the intervals for which a function is increasing, decreasing, or constant?	Math Notes Questioning Techniques	ACT Bellringer	Formative assessment through guided practice ME, ME, ME! Page 258: 25-36 (Pre-AP Book)
9	F.1F.4	How do I determine the intervals for which a function is increasing, decreasing, or constant? How do I determine the max/min?	Math Notes Think-Pair-Share	ACT Bellringer	Formative assessment through guided practice and questioning techniques Analyze the Graph Worksheet

10	F.BF.4b	How do I perform composition on functions using graphs?	LTF: Composition of Functions	ACT Bellringer	Formative assessment through monitoring of LTF Lesson
11	F.BF.4b	How do I perform composition on functions using equations?	Math Notes Collaborative group work using 6.6 Think About a Plan	ACT Bellringer	Formative assessment through monitoring of group work "Why" Boxes Page 402: 27-46
12	F.BF.4b	Same as Days 10 and 11	Reciprocal Teaching within Collaborative Groups	ACT Bellringer	Formative assessment through monitoring of group work Practice 6.6 Form G (13-28)
13	F.BF.3	How do I determine the graph of a function based on changes to the equation of the parent function?	LTF: Transformations of Functions Exploration	ACT Bellringer	Formative assessment through questioning techniques and monitoring of student work Page 274: 1-12 (Pre-AP Book)

14	F.BF.3	How do I write a function rule for the transformations of the parent graph?	Continuation of LTF Lesson	ACT Bellringer	Formative assessment through guided practice Page 104: 10-33
15	F.BF.3	Same as Days 13 and 14	LTF: A Transformation Story in collaborative groups	ACT Bellringer	Formative assessment through monitoring of collaborative groups and questioning techniques

16	F.BF.3	Same as Days 13 and 14	Reciprocal Teaching in Collaborative Groups	ACT Bellringers	Formative assessment through monitoring of student groups Practice 2.6 Form G
17		Review of Focus Questions from Days 1-16	Independent Work Think-Pair-Share Collaborative Group Work	ACT Bellringer	Review Game using LTF: Characteristics of Functions Cell Phone Activity
18		Unit Test	Constructed Response 3 Levels of Questions		Summative Assessment

