Assessment Blueprint - Unit 4 Functions

Unit 4 Overview and Readiness (prerequisite skill assessment)

Item	TEKS
1	Math 8.4(C) use data from a table or graph to determine the rate of change or slope and y-intercept in mathematical and real-world problems
2	Math 8.4(C) use data from a table or graph to determine the rate of change or slope and y-intercept in mathematical and real-world problems *(describe verbally)*
3	Math 5.4(D) recognize the difference between additive and multiplicative numerical patterns given in a table or graph *(verbal description given)*

Unit 4 Section A

Item	TEKS
1	A12(A) decide whether relations represented verbally, tabularly, graphically, and symbolically define a function
2	A2(C) write linear equations in two variables given a table of values, a graph, and a verbal description
3	A12(B) evaluate functions, expressed in function notation, given one or more elements in their domains
4	A2(C) write linear equations in two variables given a table of values, a graph, and a verbal description
5	A12(B) evaluate functions, expressed in function notation, given one or more elements in their domains

Unit 4 Section B

Item	TEKS
1	A12(B) evaluate functions, expressed in function notation, given one or more elements in their domains
2	A3(B) decide whether relations represented verbally, tabularly, graphically, and symbolically define a function calculate the rate of change of a linear function represented tabularly, graphically, or algebraically in context of mathematical and real-world problems
3	A3(B) decide whether relations represented verbally, tabularly, graphically, and symbolically define a function calculate the rate of change of a linear function represented tabularly, graphically, or algebraically in context of mathematical and real-world problems
4	A12(B) evaluate functions, expressed in function notation, given one or more elements in their domains
5	A3(E)determine the effects on the graph of the parent function $f(x) = x$ when $f(x)$ is replaced by $af(x)$, $f(x)+d$,$f(x-c)$, $f(bx)$ for specific values of a, b, c, and d

Unit 4 Section C

Item	TEKS
1	A2(A) determine the domain and range of a linear function in mathematical problems; determine reasonable domain and range values for real-world situations; both continuous and discrete; and represent domain and range using inequalities
2	A2(A) determine the domain and range of a linear function in mathematical problems; determine reasonable domain and range values for real-world situations; both continuous and discrete; and represent domain and range using inequalities
3	A12(B) evaluate functions, expressed in function notation, given one or more elements in their domains

4	A2(A) determine the domain and range of a linear function in mathematical problems; determine reasonable domain and range values for real-world situations; both continuous and discrete; and represent domain and range using inequalities
5	A2(A) determine the domain and range of a linear function in mathematical problems; determine reasonable domain and range values for real-world situations; both continuous and discrete; and represent domain and range using inequalities

Unit 4 Section D

Item	TEKS
1	A12(C) identify terms of arithmetic and geometric sequences when the sequences are given in function form using recursive processes
2	A12(C) identify terms of arithmetic and geometric sequences when the sequences are given in function form using recursive processes
3	A12(D) write a formula for the nth term of arithmetic and geometric sequences, given the value of several of their terms
4	A12(D) write a formula for the nth term of arithmetic and geometric sequences, given the value of several of their terms
5	A12(D) write a formula for the nth term of arithmetic and geometric sequences, given the value of several of their terms

Unit 4 Quiz

Item	TEKS
1	A2(C) write linear equations in two variables given a table of values, a graph, and a verbal description
2	A12(A) decide whether relations represented verbally, tabularly, graphically, and symbolically define a function

3	A12(A) decide whether relations represented verbally, tabularly, graphically, and symbolically define a function
4	A2(C) write linear equations in two variables given a table of values, a graph, and a verbal description
5	A3(E) determine the effects on the graph of the parent function $f(x) = x$ when $f(x)$ is replaced by $af(x)$, $f(x)+d$,$f(x-c)$, $f(bx)$ for specific values of a, b, c, and d
6	A12(B) evaluate functions, expressed in function notation, given one or more elements in their domains
7	A2(A) determine the domain and range of a linear function in mathematical problems; determine reasonable domain and range values for real-world situations; both continuous and discrete; and represent domain and range using inequalities
8	A12(C) identify terms of arithmetic and geometric sequences when the sequences are given in function form using recursive processes
9	A12(C) identify terms of arithmetic and geometric sequences when the sequences are given in function form using recursive processes
10	A12(C) identify terms of arithmetic and geometric sequences when the sequences are given in function form using recursive processes
11	A3(C) graph linear functions on the coordinate plane and identify key features, including x-intercept, y-intercept, zeros, and slope, in mathematical and real-world problems
12 check	A3(B) decide whether relations represented verbally, tabularly, graphically, and symbolically define a function calculate the rate of change of a linear function represented tabularly, graphically, or algebraically in context of mathematical and real-world problems
13 check	A3(B) decide whether relations represented verbally, tabularly, graphically, and symbolically define a function calculate the rate of change of a linear function represented tabularly, graphically, or algebraically in context of mathematical and real-world problems

Unit 4 STAAR Review

Item	TEKS
1	A2(C) write linear equations in two variables given a table of values, a graph, and a verbal description
2	A2(A) determine the domain and range of a linear function in mathematical problems; determine reasonable domain and range values for real-world situations; both continuous and discrete; and represent domain and range using inequalities
3	A3(C) graph linear functions on the coordinate plane and identify key features, including x-intercept, y-intercept, zeros, and slope, in mathematical and real-world problems
4	A3(B) decide whether relations represented verbally, tabularly, graphically, and symbolically define a function calculate the rate of change of a linear function represented tabularly, graphically, or algebraically in context of mathematical and real-world problems
5	A12(A) decide whether relations represented verbally, tabularly, graphically, and symbolically define a function
6	A4(C) write, with and without technology, linear functions that provide a reasonable fit to data to estimate solutions and make predictions for real-world problems
7	A3(D) graph the solution set of linear inequalities in two variables on the coordinate plane
8	A5(C) solve systems of two linear equations with two variables for mathematical and real-world problems
9	A3(C) graph linear functions on the coordinate plane and identify key features, including x-intercept, y-intercept, zeros, and slope, in mathematical and real-world problems
10	A2(B) write linear equations in two variables in various forms, including $y=mx+b$, $Ax+By=C$, and $y-y_1=m(x-x_1)$, given one point and the slope and given two points

Unit 4 Project

TEKS
A3(B) calculate the rate of change of a linear function represented tabularly, graphically, or algebraically in context of mathematical and real-world problems
A4(C) write, with and without technology, linear functions that provide a reasonable fit to data to estimate solutions and make predictions for real-world problems