Guide to Mathematics Tutoring or Intervention Publications in Preparation for TAKS

The Pubs tab below contains a listing of the Region 4 publications routinely used for TAKS math tutoring or intervention, as well as those publications used to prepare this document. Also included are the table of contents for most of these publications.

The Matrix tab below contains a listing of all high school math TEKS to be covered on the grade level tests with the associated TAKS objectives by grade level. Then listed are the locations in each of the included publications where reference to that TEKS SE or TAKS Objective may be found.

Since this document is done in EXCEL for electronic usage, any of contents may be sorted at the discretion of the user.

Publications for Math Tutoring and Intervention

TAKS Mathematics Preparation Grade 8 - Region 4 (2003)
TAKS Mathematics Preparation Grade 9 - Region 4 (Jul 2006)
TAKS Mathematics Preparation Grade 10 - Region 4 (Jul 2006)
TAKS Mathematics Preparation Grade 11 - Region 4 (Jul 2006)
Closing the Distance - A Flexible Tutorial for TAKS - Grade 9 Mathematics - Region 4 (Nov 2007)
Closing the Distance - A Flexible Tutorial for TAKS - Grade 10 Mathematics - Region 4 (Nov 2007)
Closing the Distance - A Flexible Tutorial for TAKS - Grade 11 Exit Mathematics - Region 4 (Oct 2007)
Accelerated Curriculum for Mathematics Grade 11 Exit TAKS - Region 4 (Jan 2005)

Sources Used for Math TEKS and TAKS

TAKS Information Booklet Mathematics Grade 9 - TEA (Mar 2007)
TAKS Information Booklet Mathematics Grade 10 - TEA (Mar 2007)
TAKS Information Booklet Mathematics Exit Level - TEA (Mar 2007)

Closing the Distance - A Flexible Tutorial for TAKS - Grade 9 Mathematics

Uses the 5E Model

Lesson 1 Coordinate Plane
Lesson 2 Linear Functions
Lesson 3 Scatterplots and Functions
Lesson 4 Graphs of Linear Functions
Lesson 5 Writing and Solving Equations and Inequalities
Lesson 6 Simplifying Expressions and Solving Equations
Lesson 7 Systems of Linear Equations
Lesson 8 Exploring Graphs of Quadratic Functions
Lesson 9 Solids and Planar Figures
Lesson 10 Modeling and Applying the Pythagorean Theorem
Lesson 11 Area Models
Lesson 12 Surface Area and Volume
Lesson 13 Scale Factor and Similar Figures
Lesson 14 Probability and Central Tendancy
Lesson 15 Discovering Patterns

Closing the Distance - A Flexible Tutorial for TAKS - Grade 10 Mathematics

Uses the 5E Model

Lesson 1 Coordinates and Transformations
Lesson 2 Understanding Linear Functions
Lesson 3 Scatterplots and Functions
Lesson 4 Graphs of Linear Functions
Lesson 5 Exploring Equations and Inequalities
Lesson 6 Simplifying Expressions and Solving Equations
Lesson 7 Systems of Linear Equations
Lesson 8 Investigating Quadratic Functions
Lesson 9 Geometric Figures
Lesson 10 Pythagorean Theorem Applications
Lesson 11 Multiplying Monomials and Binomials
Lesson 12 Surface Area and Volume
Lesson 13 Similar Figures and Dilations
Lesson 14 Probability and Data Analysis
Lesson 15 Investigating Patterns

Closing the Distance - A Flexible Tutorial for TAKS - Grade 11 Exit Mathematics

Uses the 5E Model

Lesson 1 Figures and Transformations
Lesson 2 Linear and Non-Linear Functions
Lesson 3 Inequalities
Lesson 4 Graphs of Linear Functions
Lesson 5 Writing Equations and Inequalities
Lesson 6 Expressions, Equations, and Inequalities
Lesson 7 Writing and Solving Systems of Linear Equations
Lesson 8 Graphs, Transformations, and Solving Equations
Lesson 9 Geometric Figures
Lesson 10 Right Triangles and Distance
Lesson 11 Composite Figures
Lesson 12 Area, Surface Area, and Volume
Lesson 13 Similar Figures
Lesson 14 Central Tendancy and Predictions
Lesson 15 Generalizing Patterns

Accelerated Curriculum for Mathematics Grade 11 TAKS

Uses the 5E Model

Unit 1 Foundations for Funtions

Lesoon 1.1 Introduction to Functions
Lesson 1.2 Data Collection
Lesson 1.3 What's My Pattern?

Unit 2 Linear Functions

Lesson 2.1 Launching Linear Functions
Lesson 2.2 How Much Will I Earn?

Unit 3 Linear Equations

Lesson 3.1 Using Algebra Tiles
Lesson 3.2 Slopes and Intercepts
Lesson 3.3 Solving Real World Problems

Unit 4 Sytems of Linear Equations

Lesson 4.1 How Much Will It Cost?
Lesson 4.2 Heads and Legs

Unit 5 Inequalities

Lesson 5.1 One Variable Inequalities
Lesson 5.2 Two Variable Inequalities

Unit 6 Nonlinear Functions

Lesson 6.1 Quadratic Functions
Lesson 6.2 Properties of Exponents
Lesoon 6.3 Factoring of Quadratic Equations
Lesson 6.4 Exponential Functions

Unit 7 Transformations

Lesson 7.1 Isometries
Lesson 7.2 Dilations

Unit 8 Triangles

Lesson 8.1 Angle Relationships
Lesson 8.2 Pythagorean Theorem
Lesson 8.3 Special Right Triangles

Unit 9 Polygons

Lesson 9.1 Similar Polygons
Lesson 9.2 Properties of Polygons

Unit 10 Circles

Lesson 10.1 Vocabulary of Circles
Lesson 10.2 Circumferences and Arc Length
Lesson 10.3 Areas of Circles and Sectors

Unit 11 Area and Volume

Lesson 11.1 Visualizing
Lesson 11.2 Calculating Area and Volume

Unit 12 Probability and Statistics

Lesson 12.1 Proportionality and Probability
Lesson 12.2 Statistics and Graphs

TAKS Mathematics Preparation Guide Grade 11

Uses the 5E Model

All objectives begin with a summary and end with selected response questions.

Objective 1 - Input-Output Lesson, Patterns and Funtion Relationships Lesson
Objective 2 - Action Figure Bungee Lesson, 2 Symbolic Manipulation Lessons (Linear & Quadratic)
Objective 3 - Exploring Linear Functions Lesson
Objective 4 - Systems of Linear Equations Lesson
Objective 5 - Quadratic Functions Lesson
Objective 6 - Special Right Triangle Lesson, Coordinate Transformation Lesson
Objective 7 - Shape Up! Lesson, What's Your View on This? Lesson
Objective 8 - Surface Area Lesson, Volume Lesson
Objective 9 - Yummy Blasters! Probability Lesson, Exploring Data Lesson, Ballot Box Lesson
Objective 10 - Critical Thinking Through Problem Solving, 2 Performance Tasks

TAKS Mathematics Preparation Guide Grade 10

Uses the 5E Model

All objectives begin with a summary and end with selected response questions.

Objective 1 - Input-Output Lesson, Patterns and Funtion Relationships Lesson
Objective 2 - Caught in the Net Lesson, 2 Symbolic Manipulation Lessons (Linear & Quadratic)
Objective 3 - Slope and Intercepts Lesson, Writing Linear Equations Lesson
Objective 4 - Angle Relationships Lesson, Systems of Linear Equations Lesson
Objective 5 - Maximizing Area Lesson
Objective 6 - 4 Coordinate Plane Lessons: Translations, Rotations, Reflections, Dilations
Objective 7 - What's Your View on This? Lesson, Pythagorean Theorem? Lesson
Objective 8 - Surface Area and Volume Lesson, Volume Lesson
Objective 9 - Terra Firma Probability Lesson, Exploring Data Lesson, Ballot Box Lesson
Objective 10 - Critical Thinking Through Problem Solving, 2 Performance Tasks

TAKS Mathematics Preparation Guide Grade 9

Uses the 5E Model

All objectives begin with a summary and end with selected response questions.

Objective 1 - Input-Output Lesson, Patterns and Funtion Relationships Lesson

Objective 2 - Paperclip Skydiving Lesson, 2 Symbolic Manipulation Lessons (Linear & Quadratic)

Objective 3 - Slope Lesson, Representations of Linear Equations Lesson

Objective 4 - Modeling Linear Functions Lesson, Systems of Linear Equations Lesson

Objective 5 - Law of Exponents Lesson

Objective 6 - 4 Coordinate Plane Lessons: Translations, Rotations, Reflections, Dilations

Objective 7 - What's Your View on This? Lesson, Pythagorean Theorem? Lesson

Objective 8 - Surface Area and Volume Lesson

Objective 9 - The Great Race! Probability Lesson, Exploring Data Lesson

Objective 10 - Critical Thinking Through Problem Solving, 2 Performance Tasks

TAKS Mathematics Preparation Guide Grade 8

Uses the 5E Model

All objectives begin with a summary and end with selected response questions.

Objective 1 - Numbers, Operations, and Quantitative Reasoning

Operations Using Rational Numbers Lesson, Irrational Numbers Lesson, Scale Model Lesson

Objective 2 - Patterns, Relationships, and Algebraic Reasoning

Proportional and Non-proportional Lesson; Percents, Similarity , and Rates Lesson: Patterns and Sequences Lesson

Objective 3 - Geometry and Spatial Reasoning

4 Coordinate Plane Lessons: Translations, Rotations, Reflections, Dilations; What's Your View on This? Lesson; Pythagorean Theorem? Lesson

Objective 4 - Concepts and Uses of Measurement

Surface Area and Volume Lesson

Objective 5 - Probability and Statistics

Probability Lesson, Central Tendancy Lesson

Objective 6 - Mathematical Processes and Tools

Critical Thinking Through Problem Solving, 2 Performance Tasks

High School TEKS & TAKS				Region 4 Tutoring or Intervention Publications							
TEKS SE	TAKS Obj Grade 9	TAKS Obj Grade 10	TAKS Obj Exit Level	Accelerated Curriculum Grade 11 Exit Lesson #	Closing the Distance Grade 9 Lesson #	Closing the Distance Grade 10 Lesson #	Closing the Distance Grade 11 Exit Lesson #	TAKS Prep Gr 8 Obj #	TAKS Prep Gr 9 Obj #	TAKS Prep Gr 10 Obj #	TAKS Prep Gr 11 Obj #
8.1(B)	9							1			
8.3(B)	9	9	9	12.1	5, 13	5		2	9	9	
8.6(A)	6	6			13	13		3	6	6	
8.6(B)	6	6			1, 13	1, 13		3	6	6	
8.7(A)	7	7			9	9		3	7	7	
8.7(B)	7	7				9, 13		3	7	7	
8.7(C)	7	7			10	10		3	7	7	
8.7(D)	6	6			1	1		3	6	6	
8.8(A)	8	8			12	12		4	8	8	
8.8(B)	8	8			12	12		4	8	8	
8.8(C)	8	8			12	12		4	8	8	
8.9(A)	8	8			10	10		4	8	8	
8.9(B)	8	8			13	13		4	8	8	
8.10(A)	8	8			13	13		4	8	8	
8.10(B)	8	8						4	8	8	
8.11(A)	9	9	9	12.1	14	14		5	9	9	9
8.11(B)	9	9	9	12.1	14	14	14	5	9	9	9
8.12(A)	9	9	9	12.2	14	14	14	5	9	9	9
8.12(C)	9	9	9	12.2	14	14		5	9	9	9
8.13(B)	9	9	9	12.2	14	14		5	9	9	
8.14(A)	10	10	10					6	10	10	10
8.14(B)	10	10	10					6	10	10	10
8.14(C)	10	10	10		15	15	15	6	10	10	10
8.15(A)	10	10	10		9, 12		6	6	10	10	10
8.16(A)	10	10	10		9, 15	15	15	6	10	10	10
8.16(B)	10	10	10		9, 15	9, 15	15	6	10	10	10

A.1(A)	**1**	**1**	**1**	1.1, 1.2, 1.3		2			1	1	1, 8
A.1(B)	**1**	**1**	**1**	1.2, 1.3	2	2, 8	2,3		1	1	1, 8
A.1(C)	**1**	**1**	**1**	1.2, 1.3	2				1	1	1, 8
A.1(D)	**1**	**1**	**1**	1.2, 1.3, 3.1, 3.2, 3.3, 5.1, 5.2		3	3,8		1	1	1, 8
A.1(E)	**1**	**1**	**1**	1.2, 1.3		3			1	1	1, 8
A.2(A)	**2**	**2**	**2**	6.1					2	2	
A.2(B)	**2**	**2**	**2**			3			2	2	2
A.2(C)	**2**	**2**	**2**		3				2	2	
A.2(D)	**2**	**2**	**2**		3	3			2	2	2
A.3(A)	**2**	**2**	**2**			11	5		2	2	2
A.3(B)	**2**	**2**	**2**		2				2	2	2
A.4(A)	**2**	**2**	**2**	3.1, 3.2, 3.3	6,11	6, 11	5		2	2	2
A.4(B)	**2**	**2**	**2**	3.1, 3.2, 3.3	6	6	5,6		2	2	2
A.4(C)	**2**	**2**	**2**							1	
A.5(A)	**3**	**3**	**3**	2.1, 2.2			2		3	3	
A.5(B)				2.1, 2.2							
A.5(C)	**3**	**3**	**3**	2.1, 2.2	4		2,3		3	3	3
A.6(A)	**3**	**3**	**3**	2.1, 2.2	4	4	4		3	3	
A.6(B)	**3**	**3**	**3**	2.1, 2.2					3	3	
A.6(C)	**3**	**3**	**3**	2.1, 2.2	4		4		3	3	
A.6(D)	**3**	**3**	**3**	2.1, 2.2, 3.2	4	4			3	3	
A.6(E)	**3**	**3**	**3**	2.1, 2.2, 3.2	4	4	4		3	3	
A.6(F)	**3**	**3**	**3**	2.1, 2.2, 3.3					3	3	
A.6(G)	**3**	**3**	**3**						3	3	
A.7(A)	**4**	**4**	**4**	2.1, 2.2, 5.1, 5.2	5, 9	2, 5	5		4	4	
A.7(B)	**4**	**4**	**4**	2.1, 2.2, 3.1, 3.2, 3.3, 5.1, 5.2	5, 6	5, 6	6		4	4	
A.7(C)	**4**	**4**	**4**	2.1, 2.2, 3.1, 3.2, 3.3, 5.1, 5.2	5	5	5		4	4	
A.8(A)	**4**	**4**	**4**	4.1, 4.2	7	7	7		4	4	4
A.8(B)		**4**	**4**	4.1, 4.2		7	7			4	4
A.8(C)		**4**	**4**	4.1, 4.2		7	7			4	4
A.9(A)											
A.9(B)		**5**	**5**	6.1		8	8			5	5
A.9(C)	**5**	**5**	**5**	6.1	8	8	8		5	5	5
A.9(D)		**5**	**5**	6.1, 6.3		8	8			5	5

A.10(A)		**5**	**5**	6.1, 6.3		8	2,8			5	
A.10(B)		**5**	**5**	6.3		8	8			5	
A.11(A)	**5**	**5**	**5**	6.2	11	11			5	5	
A.11(B)											
A.11(C)				6.4							
G.1(A)											
G.1(B)											
G.1(C)											
G.2(A)				7.1, 7.2, 8.1, 8.2, 8.3, 9.1, 9.2, 10.1, 10.2, 10.3							
G.2(B)				7.1, 7.2, 8.1, 8.2, 8.3, 9.1, 9.2, 10.1, 10.2, 10.3							
G.3(A)											
G.3(B)				7.1, 7.2, 8.1, 8.2, 8.3, 9.1, 9.2, 10.1, 10.2, 10.3							
G.3(C)											
G.3(D)				7.1, 7.2, 8.1, 8.2, 8.3, 9.1, 9.2, 10.1, 10.2, 10.3							
G.3(E)											
G.4(A)			**6**	7.1, 7.2, 8.1, 8.2, 8.3, 9.1, 9.2, 10.1, 10.2, 10.3			10, 11, 12				
G.5(A)			**6**								
G.5(B)			**6**	9.1, 9.2, 10.1, 10.2, 10.3							
G.5(C)			**6**	7.1, 7.2							6
G.5(D)			**6**	8.2, 8.3			10				
G.6(A)											8

G.6(B)			**7**	11.1			9				8
G.6(C)			**7**	11.1			9				7
G.7(A)			**7**	7.1, 7.2, 8.1, 8.2, 8.3, 9.1, 9.2			1				7
G.7(B)			**7**	8.1, 8.2, 8.3, 9.1, 9.2							7
G.7(C)			**7**	8.2, 8.3			1				
G.8(A)			**8**	11.2			11				8
G.8(B)			**8**	10.2, 10.3							8
G.8(C)			**8**	8.2, 8.3			10				6, 8
G.8(D)			**8**	11.2			12				8
G.9(A)											
G.9(B)											
G.9(C)											
G.9(D)			**7**				9				7
G.10(A)			**6**	7.1, 7.2			1				
G.10(B)											
G.11(A)			**8**	7.1, 7.2			13				
G.11(B)			**8**	7.1, 7.2, 8.2, 8.3, 9.1			13				
G.11(C)			**8**	8.2, 8.3							6
G.11(D)			**8**	11.2							