

My Mathematics 7-12 (235) Study Plan

Directions:

Step 1: Know Your Exam

Every certification exam has an exam framework, which outlines the format and content you could be assessed on when taking your exam. Before taking a practice test or opening a study guide, you want to ensure that you have a clear understanding of what to expect on your exam. Read the exam framework (page 3) from Pearson for the TEXES Mathematics 7-12 (235) Exam. After you've read through the framework, complete the tables below.

	Exam Overview			
	Question	Response		
1	What are the time limits on the exam?			
2	How many questions are on the exam?			
3	What is the format of the questions (ex: 100% are selected response)?			

Step 2: Self-Assess

Read the competencies and descriptive statements you'll be assessed on for each test section. While you are reading the competencies and descriptive statements, highlight or make note of any concepts or vocabulary that you know you will need to review.

Then, take a diagnostic for each section, and use that to help you self-assess in each category. If you have recently taken the official test, you can use your score report instead of a new diagnostic. Using your notes from the exam framework and practice exam results, complete the table below to determine your anticipated areas of strength and growth. When you are determining the priority for studying, consider how many questions are expected on the official test, how you did on the diagnostic, and what you know you need to review from the test competencies. You can use the information in this table to help you prioritize what to study.

Exam Competency Prioritization

Subtest: Mathematics

Click here to read the competencies for this test section (starting on page 7).

- The competency statements broadly define what an entry-level educator in this field in Texas public schools should know and be able to do.
- The descriptive statements describe in greater detail the knowledge and skills eligible for testing.

Recommended Diagnostic: 240Tutoring TExES: Mathematics 7-12 (235)

Competency		Number of Questions	My Percentage Correct on a Practice Test	Priority for Studying (High, Medium, Low)
	Competency 001: The teacher understands the real number system and its structure, operations, algorithms and representations.	≈3		
Domain I	Competency 002: The teacher understands the complex number system and its structure, operations, algorithms and representations.	≈3		
	Competency 003: The teacher understands number theory concepts and principles and uses numbers to model and solve problems in a variety of situations.	≈5		
	Competency 004: The teacher uses patterns to model and solve problems and formulate conjectures.	≈3		
	Competency 005: The teacher understands attributes of functions,	≈4		

	relations and their graphs.		
	Competency 006: The teacher understands linear and quadratic functions, analyzes their algebraic and graphical properties and uses them to model and solve problems.	≈4	
Domain II	Competency 007: The teacher understands polynomial, rational, radical, absolute value and piecewise functions, analyzes their algebraic and graphical properties and uses them to model and solve problems.	≈5	
	Competency 008: The teacher understands exponential and logarithmic functions, analyses their algebraic and graphical properties and uses them to model and solve problems.	≈4	
	Competency 009: The teacher understands trigonometric and circular functions, analyzes their algebraic and graphical properties and uses them to model and solve problems.	≈4	
	Competency 010: The teacher understands and solves problems using differential and integral calculus.	≈3	
	Competency 011: The teacher understands measurement as a process.	≈4	
Domain III	Competency 012: The teacher understands geometries, in particular Euclidean geometry, as axiomatic systems.	≈3	
	Competency 013: The teacher understands the results, uses and applications of Euclidean geometry.	≈4	
	Competency 014: The teacher understands coordinate, transformational and vector geometry and their connections.	≈4	

	Competency 015: The teacher understands how to use appropriate graphical and numerical techniques to explore data, characterize patterns and describe departures from patterns.	≈3	
Domain IV	Competency 016: The teacher understands concepts and applications of probability.	≈4	
	Competency 017: The teacher understands the relationships among probability theory, sampling and statistical inference and how statistical inference is used in making and evaluating predictions.	≈4	
	Competency 018: The teacher understands mathematical reasoning and problem solving.	≈4	
Domain V	Competency 019: The teacher understands mathematical connections both within and outside of mathematics and how to communicate mathematical ideas and concepts.	≈4	
Domain VI	Competency 020: The teacher understands how children learn mathematics and plans, organizes and implements instruction using knowledge of students, subject matter and statewide curriculum (Texas Essential Knowledge and Skills [TEKS]).	≈5	
	Competency 021: The teacher understands assessment and uses a variety of formal and informal assessment techniques to monitor and guide mathematics instruction and to evaluate student progress.	≈3	

Step 3: Identify Resources

You have read the exam framework and identified concepts you know you need to review. You've taken a diagnostic and identified priorities for your study time. Now, take some time (15-30 minutes) to explore *additional* resources beyond 240Tutoring that you can reference to help you study. We've provided a few below to help you get started!

Resource	Content	Cost
cK-12 Open Courseware	This site houses searchable textbooks with content chunked out, linked to video, and in some cases, with practice questions. These resources are a good fit for anyone who needs to learn the content that is tested, not necessarily how to teach the content to 7-12 students.	Free
240Tutoring	All content areas. Most people benefit the most from using additional resources to learn unfamiliar content while using the 240Tutoring quizzes and practices tests to check understanding and gain testing permission.	\$40 per month standard rate. \$20 per month student-discounted rate offered through Relay to enrolled students
Khan Academy	Math (all)	Free
Mometrix e-Library	All content areas (see Teaching Category)	Free to enrolled students

Step 4: Create Your Plan and Study!

Create and follow a scheduled plan that provides you with regular, protected study time. Use your prioritization of competencies to help you plan. To see a sample plan, click <u>here</u>. It may be useful to start from the sample plan and make adjustments based on your areas of strength and areas for growth.

General Study Plan:
Resources to Use:
Number of weeks in my study plan:
Total number of hours per week:
Times that I will study and Accountability:

Week	Mathematics
1	
2	

Step 5: Take a practice test and submit passing scores to My Checklist (to be completed during enrollment at Relay)

Once you've completed your study plan, take a practice test to gain testing permission. You must be an enrolled student to gain testing permission. All practice tests should be taken under conditions that are as close to real testing conditions as possible. This includes:

- 1. Completing the test in one-sitting in a quiet environment, free of distractions
- 2. Adhering to the same time limits as the official test
- 3. Using only allowable resources (e.g. blank paper and pencil, calculator for some tests, etc.)

For more information on options for practice tests and what a passing score is for each option, please read the <u>Relay Texas Guide to Testing Permissions</u>.