1st Grade Math Study Guide
Credit by Exam for Credit Recovery or Acceleration

The exam you are interested in taking is designed to test your proficiency in the relevant subject matter. You should be thoroughly familiar with the subject matter before you attempt to take the exam. This EA/CBE Study Guide can help you prepare for the exam by giving you an idea of what you need to review. You can check your familiarity level by reviewing the Texas Essential Knowledge and Skills (TEKS) for this course (see below). To refine your skills, you can refer to any of the state-adopted textbooks.

Texas Essential Knowledge and Skills (TEKS)

Every question that appears on this exam is derived from the knowledge and skills statements and student expectations within the Texas-mandated standards, the Texas Essential Knowledge and Skills (TEKS). You can view the TEKS for this exam online via the following link: http://ritter.tea.state.tx.us/rules/tac/chapter111/ch111a.html - 111.3. Refer to section (b), Knowledge and skills, 1A–9D.

Throughout this guide, you'll see TEKS references. These refer to the numbers listed under (b) Knowledge and skills; for example, 1A or 3B.

Materials Needed

Paper exams

You will need to bring a #2 pencil to complete the exam. You will receive a computer-graded answer sheet when you arrive at the testing center.

Online Exams

If necessary, materials will be provided by the testing center.

Exam Structure

You will be allowed **3 hours** to complete this exam. The exam consists of 43 multiple-choice questions that are equally weighted. You will be allowed two short, monitored breaks during the exam. The exam covers the following 5 Objectives:

Objective 1: Number and Operations (16 questions)
Objective 2: Algebraic Reasoning (5 questions)
Objective 3: Geometry and Measurement (11 questions)
Objective 4: Data Analysis (5 questions)
Objective 5: Personal Financial Literacy (5 questions)

Scholastic Honesty

When you arrive at the testing center, you will be asked to carefully read the exam rules and sign a statement agreeing to take the exam in accordance with the rules. This is called the Examinee's Certification. The following is a copy of these rules:

Examinee's Certification

This certification must be signed *before* the exam is administered and then returned with the completed examination attached, or credit for the exam will not be given.

Scholastic dishonesty is a serious academic violation that will not be tolerated. Scholastic dishonesty encompasses, but is not limited to:

- copying from another student's work;
- using an unauthorized testing proctor or taking the exam at an unauthorized testing location;
- using materials not authorized by a testing proctor;
- possessing materials that are not authorized by a testing proctor, such as lessons, books, or notes;
- knowingly using or soliciting, in whole or part, the contents of an unadministered test;
- collaborating with or seeking aid from another student without authorization during the test;
- substituting for another person, or permitting another person to substitute for oneself, in taking a course test or completing any course-related assignment;
- using, buying, stealing, or transporting some or all of the contents of an unadministered test, test rubric, homework answer, or computer program.

Evidence of scholastic dishonesty will result in a grade of *F* on the examination and an *F* in the course (if applicable).

At the testing center, you will be asked to sign a statement that says
you have read the above and agree to complete the examination with scholastic honesty.

General Study Tips

The bulleted lists and sample questions in this study guide can assist you in preparing for the exam. It is a fairly complete guide, but does not cover every item on the test. Ultimately, you should use the TEKS to guide your exam preparation.

Additional Study Tips

The following information provides direction for your studies. For each part, you will find study tips and sample questions to give you a general idea of the types of questions you can expect to see on the exam.

Objective 1: Numbers and Operations

This part relates to your knowledge of place value, comparing numbers, word problems involving addition and subtraction, and identifying coins and their values. It includes 16 questions.

Study Tips for Objective 1

This part relates to TEKS 2A–4C. Familiarize yourself with those TEKS, and then be prepared to demonstrate knowledge of the following topics:

- Compose and decompose numbers up to 120 with models
- Represent numbers up to 120 using expanded and standard forms
- Compare and order numbers up to 120 with symbols and open number lines
- Add any multiple of 10 with a one-digit number (sums up to 99)
- Add, subtract, and compare sets of objects up to 20 with one of the terms being an unknown
- Compose 10 with two or more addends
- Solve addition and subtraction problems within 20 and be able to explain the strategies used
- Identify U.S. coins and their values (including pennies, nickels, dimes, and quarters)
- County by twos, fives, and tens to find the value of a collection of pennies, nickels, and/or dimes

Sample Questions for Objective 1
The following are sample questions. You can find the correct answers listed at the end of this study guide, but try answering the questions without looking at the answers first to check your comprehension.

DIRECTIONS: Select the BEST response to each of the following questions.

1. Gabriella counted the collection of coins from her piggy bank below. What is the total amount of money Gabriella has in her piggy bank?

A. 7¢
B. 32¢
C. 37¢
D. 42¢

2. Joel baked 20 gingerbread cookies. If Joel eats 7 of the cookies, which number sentence shows how many cookies are left over?

A. 20 – 7 = 13
B. 20 – 13 = 7
C. 20 + 7 = 27
D. 10 + 10 = 20

Objective 2: Algebraic Reasoning

This part relates to your knowledge of identifying number patterns and describing relationships between numbers. It includes 5 questions.

Study Tips for Objective 2

This part relates to TEKS 5A-5G. Familiarize yourself with those TEKS, and then be prepared to demonstrate knowledge of the following topics:

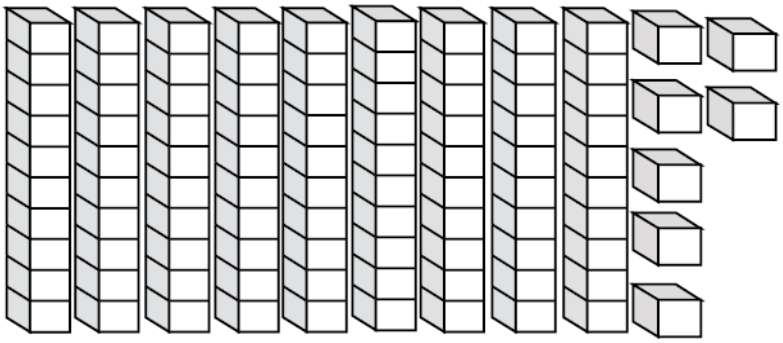
- Count numbers forward and backwards, beginning at any number, up to 120
- Skip count by twos, fives, and tens, up to 120
- Determine a number that is 10 more or 10 less than any number up to 120
- Represent addition and subtraction words problems using models and number sentences within 20
- Understand the meaning of an equal sign
- Determine the unknown number in an addition or subtraction equation
- Apply the commutative property to add and subtract two or three numbers

Sample Questions for Objective 2

The following are sample questions. You can find the correct answers listed at the end of this study guide, but try answering the questions without looking at the answers first to check your comprehension.

DIRECTIONS: Select the BEST response to each of the following questions.

3. What number is 10 less than the model below?



A. 85
B. 87
C. 97
D. 107

4. There were 20 pencils in a box. Lindsay used some of the pencils. Now there are 15 pencils in the box. Which of the following statements is true?

   A. Lindsay used 5 pencils because 20 – 5 = 15.
   B. Lindsay used 15 pencils because 10 + 5 = 15.
   C. Lindsay used 10 pencils because 20 – 10 = 10.
   D. Lindsay used 35 pencils because 20 + 15 = 35.

Objective 3: Geometry and Measurement

This part relates to your knowledge of attributes and properties of two-dimensional shapes and three-dimensional solids as well as units to describe length and time. It includes 11 questions.

Study Tips for Objective 3

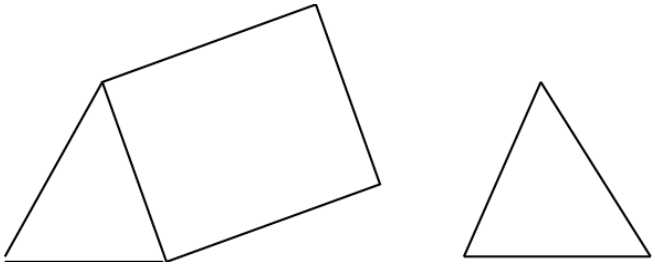
This part relates to TEKS 6A-7E. Familiarize yourself with those TEKS, and then be prepared to demonstrate knowledge of the following topics:

- Classify, sort, and identify two-dimensional shapes and three-dimensional solids based on their attributes
- Distinguish between the attributes of two-dimensional shapes and three-dimensional solids
- Join two, three, or four figures to compose a two-dimensional shape
- Partition two-dimensional shapes into halves and fourths and be able to identify examples and non-examples of halves and fourths
- Use measuring tools to measure the length of objects and describe the length to the nearest whole unit using a number and a unit
- Demonstrate that the length of an object can be measured by same-size units of length, laid end-to-end with no gaps or overlaps
- Use different units to measure the same object/distance and be able to describe how and why the measurements are different
- Tell time to the hour and half hour using analog and digital clocks

Sample Questions for Objective 3
The following are sample questions. You can find the correct answers listed at the end of this study guide, but try answering the questions without looking at the answers first to check your comprehension.

DIRECTIONS: Select the BEST response to each of the following questions.

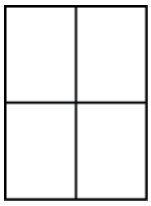
5. Frank studied the 2 objects below.

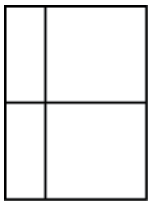


Which of the following is true about the 2 objects?

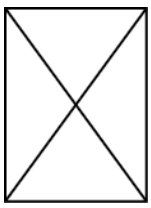
A. The triangle has more sides than the triangular prism.
*B. The triangular prism has more angles than the triangle.
C. The triangular prism and the triangle each have a total of 3 sides.
D. The triangular prism and the triangle each have a total of 3 angles.

6. Christiana folded a rectangular sheet of paper into equal parts. When she unfolded it, the paper was divided into four parts. Which of the following is correct?

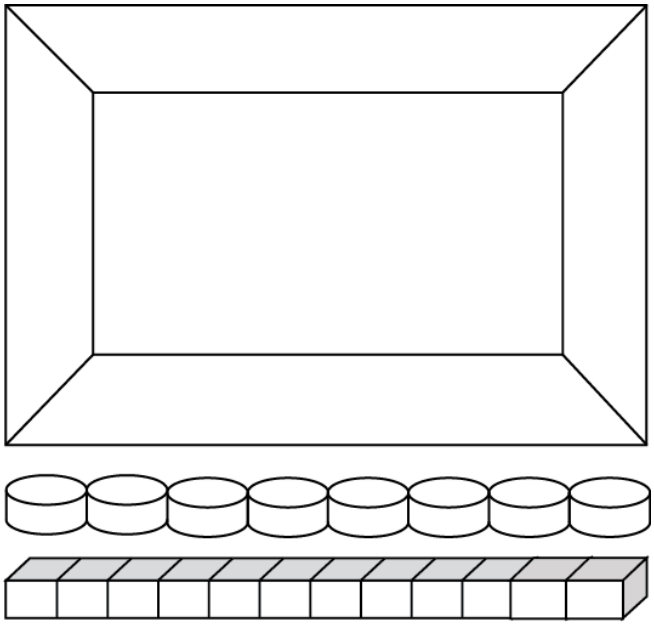
A.  This could be Christiana's paper because it is divided into fourths and each section is the same size.

B.  This could be Christiana's paper because it is divided into fourths and each section is not the same size.

C.  This could be Christiana's paper because it is divided into halves and each section is the same size.

D.  This could be Christiana's paper because it is divided into fourths and each section is the same size.

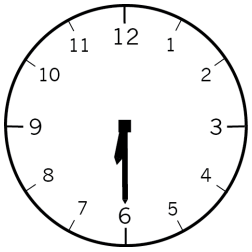
7. Sylvester measured the length of a picture frame with cans. He then measured the length of the picture frame with blocks.



Which of the following is true about the objects Sylvester used to measure the picture frame?

A. Sylvester used less blocks than can because the cans are larger.
B. Sylvester used more cans than blocks because the cans are larger.
C. Sylvester used less cans than blocks because the blocks are smaller.
D. Sylvester used more blocks than cans because the blocks are smaller.

8. Leona looks at the clock and realizes it's time for her favorite television show.



What time does Leona's favorite television show start?

A. 6:00
*B.6:30
C. 7:00
D. 7:30

Objective 4: Data Analysis

This part relates to your knowledge of organizing, interpreting, and solving problems related to data. It includes 5 questions.

Study Tips for Objective 4

This part relates to TEKS 8A-8C. Familiarize yourself with those TEKS, and then be prepared to demonstrate knowledge of the following topics:

- Collect, sort, and organize in up to three categories using tally marks or T-charts
- Create bar-type and picture graphs to represent data
- Draw conclusions from bar-type and picture graphs

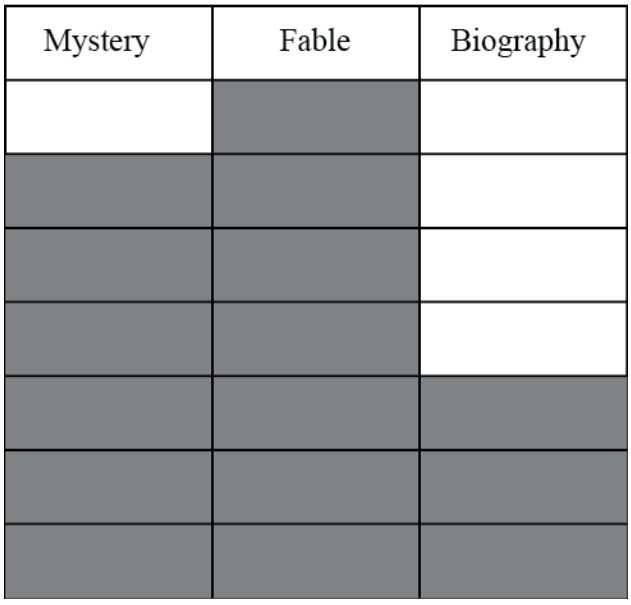
Sample Questions for Objective 4

The following are sample questions. You can find the correct answers listed at the end of this study guide, but try answering the questions without looking at the answers first to check your comprehension.

DIRECTIONS: Select the BEST response to each of the following questions.

9. Ms. Harrison created a bar graph to display his students' favorite types of books.

Students' Favorite Types of Books

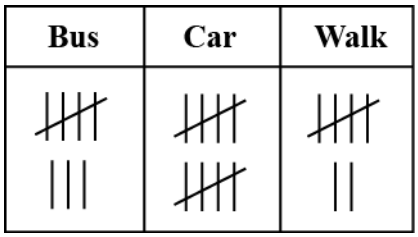


According to the bar graph, how many more students like fables than biographies?

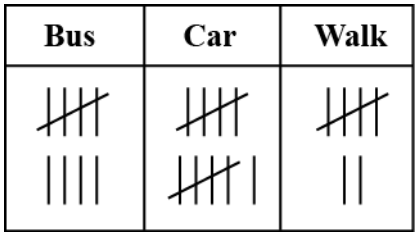
A. 4
B. 7
C. 10
D. 16

10. Ms. Kensington's first grade students were asked to place a tally mark under the way they get home after school. If 8 students ride the bus, 11 students ride in a car, and 7 students walk home, which graph below correctly displays this information?

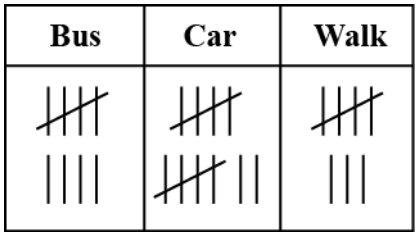
A.



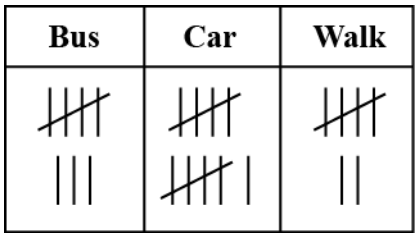
B.



C.



D.



Objective 5: Personal Financial Literacy

This part relates to your knowledge of managing financial resources effectively. It includes 5 questions.

Study Tips for Objective 5

This part relates to TEKS 9A-9D. Familiarize yourself with those TEKS, and then be prepared to demonstrate knowledge of the following topics:

- Know that income is defined as money earned
- Identify income as a means of obtaining goods and services
- Know the difference between spending and saving
- Think about giving to charity

Sample Questions for Objective 5

The following are sample questions. You can find the correct answers listed at the end of this study guide, but try answering the questions without looking at the answers first to check your comprehension.

DIRECTIONS: Select the BEST response to each of the following questions.

11. Linda wants to start a lemonade stand. Below are the supplies she will need to begin her lemonade stand.

    - Lemons = $5
    - Sugar = $3
    - Cups = $2

    Linda has $10 saved in her piggy bank. How much of her savings will she have to spend to buy the supplies for her lemonade stand?

    A. $0
    B. $5
    C $10
    D. $20

12. Robert earns income as a musician. Below he makes a list of how he spends his income:

    - Food
    - Singing lessons
    - Donation to animal shelter
    - Video games

    Which of the items on the list are an example of spending income on something Bobby **NEEDS**?

    A. Food
    D. Video games
    B. Singing lessons
    C. Donation to animal shelter

Answer Key

Item Number	Correct Answer	TEKS expectation
1	D	4A, 4B, 4C
2	A	2A, 2B, 3C, 3B, 3D, 3F
3	B	5C
4	A	5F
5	B	6B
6	A	6G, 6H
7	D	7B, 7C
8	B	7E
9	A	8C
10	D	8A, 8B
11	C	9C
12	A	9B