



Texas Assessment of Knowledge and Skills - Answer Key

Grade: 06
Subject: Mathematics
Administration: April 2009

Item Number	Correct Answer	Objective Measured	Student Expectations
01	A	05	6.9 (A)
02	J	03	6.6 (C)
03	B	01	6.1 (E)
04	H	06	6.13 (A)
05	D	05	6.10 (A)
06	H	02	6.4 (B)
07	D	03	6.6 (A)
08	F	04	6.8 (B)
09	D	02	6.3 (B)
10	H	04	6.8 (D)
11	A	01	6.2 (B)
12	J	02	6.5 (A)
13	B	04	6.8 (B)
14	H	06	6.13 (B)
15	C	01	6.1 (F)
16	F	06	6.11 (C)
17	D	01	6.1 (B)
18	F	05	6.9 (B)
19	120	01	6.2 (C)
20	G	01	6.2 (A)
21	C	03	6.6 (B)
22	J	06	6.11 (B)
23	B	02	6.4 (B)
24	H	06	6.12 (A)
25	B	01	6.1 (A)
26	J	06	6.11 (C)
27	D	02	6.3 (B)
28	G	03	6.6 (C)
29	D	04	6.8 (C)
30	H	01	6.2 (E)
31	A	02	6.3 (A)
32	H	01	6.2 (D)
33	A	05	6.10 (B)
34	J	06	6.11 (A)
35	B	02	6.4 (A)
36	J	01	6.1 (D)
37	C	04	6.8 (A)
38	F	06	6.11 (A)
39	D	03	6.6 (B)
40	F	02	6.3 (C)
41	C	05	6.10 (C)
42	G	03	6.6 (A)
43	D	05	6.10 (D)
44	F	02	6.3 (A)
45	D	06	6.11 (B)
46	F	03	6.7 (A)

TAKS Grade 6 Mathematics

For a more complete description of the objectives measured, please refer to the Revised TAKS Information Booklet for Grade 6 Mathematics at <http://www.tea.state.tx.us/student.assessment/taks/booklets/index.html>.

Objective 1: The student will demonstrate an understanding of numbers, operations, and quantitative reasoning.

- (6.1) **Number, operation, and quantitative reasoning.** The student represents and uses rational numbers in a variety of equivalent forms. The student is expected to
- (A) compare and order non-negative rational numbers;
 - (B) generate equivalent forms of rational numbers including whole numbers, fractions, and decimals;
 - (C) use integers to represent real-life situations;
 - (D) write prime factorizations using exponents;
 - (E) identify factors of a positive integer, common factors, and the greatest common factor of a set of positive integers; and
 - (F) identify multiples of a positive integer and common multiples and the least common multiple of a set of positive integers.
- (6.2) **Number, operation, and quantitative reasoning.** The student adds, subtracts, multiplies, and divides to solve problems and justify solutions. The student is expected to
- (A) model addition and subtraction situations involving fractions with [objects,] pictures, words, and numbers;
 - (B) use addition and subtraction to solve problems involving fractions and decimals;
 - (C) use multiplication and division of whole numbers to solve problems including situations involving equivalent ratios and rates;
 - (D) estimate and round to approximate reasonable results and to solve problems where exact answers are not required; and
 - (E) use order of operations to simplify whole number expressions (without exponents) in problem solving situations.

Objective 2: The student will demonstrate an understanding of patterns, relationships, and algebraic reasoning.

- (6.3) **Patterns, relationships, and algebraic thinking.** The student solves problems involving direct proportional relationships. The student is expected to
- (A) use ratios to describe proportional situations;
 - (B) represent ratios and percents with [concrete] models, fractions, and decimals; and
 - (C) use ratios to make predictions in proportional situations.

TAKS Grade 6 Mathematics (continued)

- (6.4) **Patterns, relationships, and algebraic thinking.** The student uses letters as variables in mathematical expressions to describe how one quantity changes when a related quantity changes. The student is expected to
- (A) use tables and symbols to represent and describe proportional and other relationships such as those involving conversions, arithmetic sequences (with a constant rate of change), perimeter and area; and
 - (B) use tables of data to generate formulas representing relationships involving perimeter, area, volume of a rectangular prism, etc.
- (6.5) **Patterns, relationships, and algebraic thinking.** The student uses letters to represent an unknown in an equation. The student is expected to
- (A) formulate equations from problem situations described by linear relationships.

Objective 3: The student will demonstrate an understanding of geometry and spatial reasoning.

- (6.6) **Geometry and spatial reasoning.** The student uses geometric vocabulary to describe angles, polygons, and circles. The student is expected to
- (A) use angle measurements to classify angles as acute, obtuse, or right;
 - (B) identify relationships involving angles in triangles and quadrilaterals; and
 - (C) describe the relationship between radius, diameter, and circumference of a circle.
- (6.7) **Geometry and spatial reasoning.** The student uses coordinate geometry to identify location in two dimensions. The student is expected to
- (A) locate and name points on a coordinate plane using ordered pairs of non-negative rational numbers.

Objective 4: The student will demonstrate an understanding of the concepts and uses of measurement.

- (6.8) **Measurement.** The student solves application problems involving estimation and measurement of length, area, time, temperature, volume, weight, and angles. The student is expected to
- (A) estimate measurements (including circumference) and evaluate reasonableness of results;
 - (B) select and use appropriate units, tools, or formulas to measure and to solve problems involving length (including perimeter), area, time, temperature, volume, and weight;
 - (C) measure angles; and
 - (D) convert measures within the same measurement system (customary and metric) based on relationships between units.

TAKS Grade 6 Mathematics (continued)

Objective 5: The student will demonstrate an understanding of probability and statistics.

- (6.9) **Probability and statistics.** The student uses experimental and theoretical probability to make predictions. The student is expected to
- (A) construct sample spaces using lists and tree diagrams; and
 - (B) find the probabilities of a simple event and its complement and describe the relationship between the two.
- (6.10) **Probability and statistics.** The student uses statistical representations to analyze data. The student is expected to
- (A) select and use an appropriate representation for presenting and displaying different graphical representations of the same data including line plot, line graph, bar graph[, and stem and leaf plot];
 - (B) identify mean (using [concrete objects and] pictorial models), median, mode, and range of a set of data;
 - (C) sketch circle graphs to display data; and
 - (D) solve problems by collecting, organizing, displaying, and interpreting data.

Objective 6: The student will demonstrate an understanding of the mathematical processes and tools used in problem solving.

- (6.11) **Underlying processes and mathematical tools.** The student applies Grade 6 mathematics to solve problems connected to everyday experiences, investigations in other disciplines, and activities in and outside of school. The student is expected to
- (A) identify and apply mathematics to everyday experiences, to activities in and outside of school, with other disciplines, and with other mathematical topics;
 - (B) use a problem-solving model that incorporates understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness; and
 - (C) select or develop an appropriate problem-solving strategy from a variety of different types, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem.
- (6.12) **Underlying processes and mathematical tools.** The student communicates about Grade 6 mathematics through informal and mathematical language, representations, and models. The student is expected to
- (A) communicate mathematical ideas using language, efficient tools, appropriate units, and graphical, numerical, physical, or algebraic mathematical models.
- (6.13) **Underlying processes and mathematical tools.** The student uses logical reasoning to make conjectures and verify conclusions. The student is expected to
- (A) make conjectures from patterns or sets of examples and nonexamples; and
 - (B) validate his/her conclusions using mathematical properties and relationships.



Texas Assessment of Knowledge and Skills - Answer Key

Grade: 06
Subject: Reading
Administration: April 2009

Item Number	Correct Answer	Objective Measured	Student Expectations
01	B	01	6.10 (F)
02	H	01	6.10 (F)
03	B	03	6.12 (A)
04	J	04	6.11 (C)
05	D	01	6.9 (D)
06	G	01	6.10 (G)
07	D	02	6.12 (J)
08	G	04	6.10 (H)
09	D	04	6.11 (C)
10	G	02	6.12 (F)
11	B	01	6.10 (F)
12	F	03	6.10 (E)
13	D	01	6.9 (B)
14	G	04	6.10 (H)
15	C	03	6.10 (L)
16	F	03	6.12 (A)
17	B	04	6.12 (I)
18	H	01	6.9 (B)
19	A	04	6.11 (C)
20	F	04	6.10 (H)
21	B	03	6.10 (E)
22	H	01	6.10 (F)
23	A	02	6.12 (G)
24	G	04	6.11 (C)
25	B	02	6.12 (F)
26	F	01	6.10 (F)
27	B	03	6.10 (E)
28	H	04	6.10 (H)
29	A	01	6.9 (B)
30	H	02	6.12 (G)
31	D	04	6.11 (D)
32	G	04	6.12 (K)
33	A	04	6.12 (K)
34	J	01	6.10 (F)
35	A	03	6.10 (E)
36	F	02	6.12 (J)
37	D	04	6.12 (I)
38	G	01	6.10 (G)
39	D	02	6.12 (F)
40	J	03	6.10 (L)
41	A	02	6.12 (G)
42	H	01	6.9 (B)

TAKS Grade 6 Reading

For a more complete description of the objectives measured, please refer to the Revised TAKS Information Booklet for Grade 6 Reading at <http://www.tea.state.tx.us/student.assessment/taks/booklets/index.html>.

Objective 1: The student will demonstrate a basic understanding of culturally diverse written texts.

- (6.9) **Reading/vocabulary development.** The student acquires an extensive vocabulary through reading and systematic word study. The student is expected to
- (B) draw on experiences to bring meanings to words in context such as interpreting [idioms,] multiple-meaning words, and analogies (6-8);
 - (D) determine meanings of derivatives by applying knowledge of the meanings of root words such as *like*, *pay*, or *happy* and affixes such as *dis-*, *pre-*, or *un-* (4-8); and
 - (F) distinguish denotative and connotative meanings (6-8).
- (6.10) **Reading/comprehension.** The student comprehends selections using a variety of strategies. The student is expected to
- (F) determine a text's main (or major) ideas and how those ideas are supported with details (4-8); and
 - (G) paraphrase and summarize text to recall, inform, or organize ideas (4-8).

Objective 2: The student will apply knowledge of literary elements to understand culturally diverse written texts.

- (6.12) **Reading/text structures/literary concepts.** The student analyzes the characteristics of various types of texts (genres). The student is expected to
- (F) analyze characters, including their traits, motivations, conflicts, points of view, relationships, and changes they undergo (4-8);
 - (G) recognize and analyze story plot, setting, and problem resolution (4-8); and
 - (J) recognize and interpret literary devices such as flashback, foreshadowing, and symbolism (6-8).

Objective 3: The student will use a variety of strategies to analyze culturally diverse written texts.

- (6.10) **Reading/comprehension.** The student comprehends selections using a variety of strategies. The student is expected to
- (E) use the text's structure or progression of ideas such as cause and effect or chronology to locate and recall information (4-8);

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- (I) find similarities and differences across texts such as in treatment, scope, or organization (4-8); and
 - (L) represent text information in different ways such as in outline, timeline, or graphic organizer (4-8).
- (6.12) **Reading/text structures/literary concepts.** The student analyzes the characteristics of various types of texts (genres). The student is expected to
- (A) identify the purposes of different types of texts such as to inform, influence, express, or entertain (4-8);
 - (C) compare communication in different forms such as [contrasting a dramatic performance with a print version of the same story or] comparing story variants (2-8); and
 - (H) describe how the author's perspective or point of view affects the text (4-8).

Objective 4: The student will apply critical-thinking skills to analyze culturally diverse written texts.

- (6.10) **Reading/comprehension.** The student comprehends selections using a variety of strategies. The student is expected to
- (H) draw inferences such as conclusions or generalizations and support them with text evidence [and experience] (4-8); and
 - (J) distinguish fact and opinion in various texts (4-8).
- (6.11) **Reading/literary response.** The student expresses and supports responses to various types of texts. The student is expected to
- (C) support responses by referring to relevant aspects of text [and his/her own experiences] (4-8); and
 - (D) connect, compare, and contrast ideas, themes, and issues across text (4-8).
- (6.12) **Reading/text structures/literary concepts.** The student analyzes the characteristics of various types of texts (genres). The student is expected to
- (I) analyze ways authors organize and present ideas such as through cause/effect, compare/contrast, inductively, deductively, or chronologically (6-8); and
 - (K) recognize how style, tone, and mood contribute to the effect of the text (6-8).