

ACTAAP

Arkansas Comprehensive Testing, Assessment, and Accountability Program

RELEASED ITEM

BOOKLET

GRADE 6

AUGMENTED BENCHMARK EXAMINATION

April 2012

This document is the property of the Arkansas Department of Education, and all rights of this document are reserved by the Arkansas Department of Education. Arkansas public schools may reproduce this document in full or in part for use with teachers, students, and parents. All other uses of this document are forbidden without written permission from the Arkansas Department of Education. All inquiries should be sent to the Office of Student Assessment at the Arkansas Department of Education, 501-682-4558.

Arkansas Department of Education

Acknowledgments

The Arkansas Department of Education would like to thank those who have granted permission to reproduce the following copyrighted material:

Text

Pages 2–4: “Rattlesnake Rescue” by Marilyn Kratz. Copyright © 2005 by Highlights for Children, Inc., Columbus, Ohio.

Table of Contents—2012 Augmented Benchmark Grade 6

		PAGE(S)
PART I	Overview	1
PART II	Released Test Items with Correct Responses and Rubrics	
	Released Reading Items	2
	Released Writing Prompt	12
	Released Writing Items	14
	Released Mathematics Items.....	16
PART III	Item Correlation with Curriculum Framework	
	The Arkansas English Language Arts Curriculum Frameworks—Reading Strand.....	37
	Released Items for Reading	38
	Non-Released Items for Reading	39
	The Arkansas English Language Arts Curriculum Framework—Writing Strand	40
	Released Items for Writing	41
	Non-Released Items for Writing	42
	The Arkansas Mathematics Curriculum Framework	43
	Released Items for Mathematics	45
	Non-Released Items for Mathematics.....	46

Part I Overview—2012 Augmented Benchmark Grade 6

The criterion-referenced tests implemented as part of the Arkansas Comprehensive Testing, Assessment, and Accountability Program (ACTAAP) are being developed in response to Arkansas Legislative Act 35, which requires the State Board of Education to develop a comprehensive testing program that includes assessment of the challenging academic content standards defined by the Arkansas Curriculum Frameworks.

As part of this program, all grade 6 students in Arkansas public schools participated in the *Grade 6 Augmented Benchmark Examination* in April 2012.

This Released Item Booklet for the *Grade 6 Augmented Benchmark Examination* contains test questions or items that were asked of students during the April 2012 operational administration. The test items included in Part II of this booklet are some of the items that contributed to the student performance results for that administration.

Students were given approximately two hours each day to complete assigned test sessions during the four days of testing in April 2012. Students were permitted to use a calculator for the mathematics items (both multiple-choice and open-response items), with the exception of mathematics questions 1–6 in this Released Item Booklet (items 1–10 in the test booklet). Students were also supplied with a reference sheet to be used during the mathematics sessions so that all students would have equal access to this information during testing. (See the reference sheet on page 36 of this booklet.) All of the reading, writing, and mathematics multiple-choice items within this booklet have the correct response marked with an asterisk (*). The open-response questions for reading, mathematics, and the essay prompt for writing are listed with scoring guides (rubrics) immediately following. These rubrics provide information on the scoring model used for each subject, with the scoring model for writing defining the overall curricular and instructional link for that subject with the *Arkansas English Language Arts Curriculum Framework*. The domain scoring model, implemented within Arkansas for a number of years, illustrates the appropriate instructional approaches for writing within the state.

The development of the *Grade 6 Augmented Benchmark Examination* was based on the Arkansas Curriculum Frameworks. These frameworks have common distinct levels: Strands to be taught in concert, Content Standards within each Strand, and Student Learning Expectations within each Content Standard. Abridged versions of the *Arkansas English Language Arts Curriculum Framework—Reading Strand*, *Arkansas English Language Arts Curriculum Framework—Writing Strand*, and *Arkansas Mathematics Curriculum Framework* can be found in Part III of this booklet. It is important to note that these abridged versions list only the predominant Strand, Content Standard, and Student Learning Expectation associated with each item. However, since many key concepts within the Arkansas Curriculum Frameworks are interrelated, in many cases there are other item correlations or associations across Strands, Content Standards, and Student Learning Expectations.

Part III of the Released Item Booklet contains a tabular listing of the Strand, Content Standard, and Student Learning Expectation that each question was designed to assess. The multiple-choice and open-response items found on the *Grade 6 Augmented Benchmark Examination* were developed in close association with the Arkansas education community. Arkansas teachers participated as members of the Content Advisory Committee, for each subject area, providing routine feedback and recommendations for all items. The number of items associated with specific Strands, Content Standards, and Student Learning Expectations was based on approximate proportions suggested by the Content Advisory Committee, and their recommendations were accommodated to the greatest extent possible given the overall test design. Part III of the Released Item Booklet provides Arkansas educators with specific information on how the *Grade 6 Augmented Benchmark Examination* items align or correlate with the Arkansas Curriculum Frameworks to provide models for classroom instruction.

Read the passage. Then answer multiple-choice questions 1 through 8 and open-response question A.

Rattlesnake Rescue

by Marilyn Kratz

In 1873, the U.S. government passed the Timber Culture Act. Anyone who planted 40 acres of trees would receive 160 acres of land.

Rebecca straightened up and stretched her tired back. “That’s the last seedling, Pa. Have we planted enough?”

Pa walked to the end of the row of cottonwood seedlings. “Nope,” he said. “We have to plant trees all the way to that rock over there to fill the requirements for our tree claim. We’ll need about twenty more seedlings.”

Rebecca’s twin brother, William, patted the dirt around a seedling he had just planted. “Seems like an awful lot of work just to get some land.”

“Not just ‘some land,’ son,” said Pa. “The government will give us one hundred sixty acres free, just for planting trees on these forty acres and it’s fine land. It’ll produce the best wheat and corn I’ve ever grown.

“I’ll get the seedlings,” offered Rebecca. She longed to cool her feet in the shallow river running through the cottonwood grove.

“You’d better let me go, Miss Petticoats,” teased William. “There are dangers all over this prairie.”

7 Rebecca bristled. “I can take care of myself. And don’t forget—I’m two minutes older than you!”

“You may both go,” said Pa. “But hurry back. I’d like to finish before sundown.”

“Race you!” shouted William, dashing off toward the river. “Don’t trip on your petticoat!”

10 *My petticoat won’t slow me down*, thought Rebecca. She lifted her long skirt and petticoat up to her knees, then raced after her brother.

William was sitting on the sandy riverbank, splashing his bare feet in the water, when Rebecca plopped down beside him. She stuck her feet in beside his.

“I’d like to sit here all afternoon and cool off,” she said. She pushed off her bonnet and let it hang down her back. “But Pa is waiting. Come on. Let’s get those seedlings.”



They waded to a sandbar where small cottonwood seedlings grew. Gently, they pulled the seedlings from the moist sand.

“There! That’s twenty, with a few to spare,” said Rebecca.

“I’ll carry them,” said William. He led the way to the riverbank, then stopped. “Look! There’s the dugout¹ we lived in when we moved here last year.” He pointed to a hole in the grassy bank.

“I’m glad Pa built the sod house last spring,” said Rebecca. “I hated living in that cave.”

“I liked it!” declared William. “Come on—let’s go inside.”

“No,” Rebecca said. “Pa is waiting. Besides, it’s hard telling what’s in there.”

“Then you start back, scaredy-cat,” said William, handing the seedlings to Rebecca. “I’ll catch up.” He ran to the dugout and stepped inside.

Rebecca tied the seedlings into her long apron and began to walk. Suddenly she froze in her tracks.

A huge prairie rattlesnake slithered along the riverbank. It stopped right in front of the dugout and lay still, coiled up on the warm sunny bank.

“William!” Rebecca shouted. “Don’t come out!”

¹dugout: a shelter dug into the hillside

“Huh?” William’s face appeared at a tiny window beside the door of the dugout.

Rebecca pointed toward the rattler. William’s face paled when he saw the snake blocking the doorway. He turned desperate eyes toward Rebecca, then he glanced behind himself. Rebecca knew what he was thinking: Were there more snakes lurking in the shadowy corners of the dugout?

Rebecca’s mind raced, trying to think of a way to get William out of there. An idea popped into her head. It was risky, but it was their only hope.

“Don’t move,” she said to William in a soft voice. “When I say ‘now,’ you run out of there as fast as you can.”

Rebecca removed the skirt-like petticoat from beneath her dress, then dipped it into the river. She squeezed out some of the water, then climbed to the top of the bank, directly above the dugout’s opening.

“Get ready to run, William,” she said, keeping an eye on the motionless snake.

Rebecca opened the dripping petticoat as much as she could. Her hands shook as she leaned over the bank. With one swift movement, she dropped the heavy garment on top of the snake.

“Now!” she shouted to William as the snake writhed under the petticoat.

William jumped over the covered snake and ran halfway back to the tree claim before he stopped and turned around. Rebecca was right behind him.

“Are you OK?” he asked, gasping.

Rebecca nodded. She was glad her long skirt hid her shaking knees.

They both took a minute to catch their breath and steady themselves. Rebecca checked her apron to make sure that the seedlings were still safe.

Then William reached over and gave one of Rebecca’s braids a playful tug. “Thanks, sister. I’d have done the same for you back there.”

Rebecca managed a grin. “You couldn’t have,” she said. “You don’t wear petticoats!”

Laughing, they raced back to the tree claim.

- 1** What is the main conflict in this story?
- A** Rebecca reminds William of the danger of a dugout.
 - B** Pa needs enough seedlings to receive free land.
 - * **C** Rebecca confronts a threat to William’s safety.
 - D** William wants to spend more time exploring.
- 2** Pa hopes to receive land from the government in order to
- * **A** grow good crops.
 - B** plant more trees.
 - C** build a new house.
 - D** live near the river.
- 3** In paragraph 7, the word bristled indicates that Rebecca is feeling
- A** impatient.
 - * **B** annoyed.
 - C** boastful.
 - D** surprised.
- 4** Why does Pa let Rebecca and William go to the river?
- A** He wanted them to check on the dugout.
 - * **B** He needed more cottonwood seedlings to plant.
 - C** They wanted to cool off their feet in the water.
 - D** They needed to plant seedlings on the riverbank.
- 5** In paragraph 10, why are some words in italics?
- A** They help the reader understand why Rebecca is running.
 - * **B** They emphasize an unspoken thought that Rebecca has.
 - C** They show the reader that Rebecca is telling the story.
 - D** They highlight something important about Rebecca.
- 6** Which of these comments from Rebecca **best** shows that she is a responsible person?
- A** “That’s the last seedling, Pa. Have we planted enough?”
 - B** “I’m glad Pa built the sod house last spring. I hated living in that cave.”
 - * **C** “I’d like to sit here all afternoon and cool off. But Pa is waiting. Come on. Let’s get those seedlings.”
 - D** “I can take care of myself. And don’t forget—I’m two minutes older than you!”

7 From information in the story, the reader can tell that Rebecca and William

- * **A** like to tease each other.
- B** enjoy planting seedlings.
- C** prefer to live in a dugout.
- D** become frightened easily.

8 This passage could **best** be described as

- * **A** historical fiction.
- B** an imaginary tale.
- C** an autobiography.
- D** science fiction.

Reading Item A—2012 Grade 6

- A** Describe the kind of relationship Rebecca and William have with each other. Use at least three specific details from the passage to support your answer.

Reading Item A Scoring Rubric—2012 Grade 6

Score	Description
4	The response describes the kind of relationship Rebecca and William have with each other and uses at least three specific details from the passage to support the response.
3	The response describes the kind of relationship Rebecca and William have with each other and uses two specific details from the passage to support the response.
2	The response describes the kind of relationship Rebecca and William have with each other and uses one specific detail from the passage to support the response.
1	<p>The response describes the kind of relationship Rebecca and William have with each other.</p> <p style="text-align: center;">OR</p> <p>The response demonstrates minimal understanding of the question.</p>
0	The response is totally incorrect and shows no evidence that the student understands the task. The response may be off topic or completely irrelevant.
B	Blank—No response. A score of "B" will be reported as "NA." (No attempt to answer the item. Score of "0" is assigned for the item.)

**NO TEST MATERIAL
ON THIS PAGE**

For a copy of the passage
“Make a Stack of Blueberry Pancakes”
by Ken Haedrich, used in the 2012 operational test,
please refer to the hard copy version
of the Released Item Booklet.

- 9** In the introduction, when the author tells the reader to “have everything else...ready to go,” what activity would be **best** to add?
- A** picking the blueberries
 - * **B** setting the table
 - C** going to the store
 - D** inviting some guests
- 10** What do the first six ingredients on the list have in common?
- A** They are all used in small amounts.
 - B** They all have a sweet taste.
 - * **C** They are all in dry form.
 - D** They are all spices.
- 11** When the author tells the reader to “make a well” in Step 3, he means the reader should
- * **A** scoop out a hollow.
 - B** ladle out batter.
 - C** squeeze juice from fruit.
 - D** swirl the ingredients.
- 12** How many mixing bowls do you need to prepare this recipe?
- A** 1
 - * **B** 2
 - C** 3
 - D** 4
- 13** In this recipe, which activity is **most** energetic?
- A** measuring
 - * **B** whisking
 - C** folding
 - D** pouring
- 14** What does the word perimeter mean as used in “Pancake Pointers”?
- A** smell
 - B** size
 - C** flavor
 - * **D** edge
- 15** What should you do if the batter falls into the pan in lumps?
- * **A** Thin the batter with milk.
 - B** Make up a fresh batch of batter.
 - C** Chill the batter in the refrigerator.
 - D** Press the lumps down with a spoon.
- 16** The purpose of this passage is to describe
- A** a problem.
 - * **B** a process.
 - C** an event.
 - D** a show.

Reading Item B—2012 Grade 6

- B** In “Pancake Pointers,” what does the writer mean by “Make sure your pancakes stack up every time”? Based on information from the passage, describe at least three details that support your response.

Reading Item B Scoring Rubric—2012 Grade 6

Score	Description
4	The response describes what the writer means by the statement and uses at least three details from the passage to support the response.
3	The response describes what the writer means by the statement and uses two details from the passage to support the response.
2	The response describes what the writer means by the statement and uses one detail from the passage to support the response.
1	The response describes what the writer means by the statement. OR The response demonstrates minimal understanding of the question.
0	The response is totally incorrect and shows no evidence that the student understands the task. The response may be off topic or completely irrelevant.
B	Blank—No response. A score of "B" will be reported as "NA." (No attempt to answer the item. Score of "0" is assigned for the item.)

WRITING PROMPT

Your teacher has asked you to write about what you like about summer.

Before you begin to write, think about what you do in the summer. Maybe you play sports or earn money by cutting the grass. Maybe you visit another city.

Why do you like summer?

Now write an essay for your teacher explaining why you like summer. Give enough detail so that your teacher will understand.

WRITER'S CHECKLIST

- | | |
|--|---|
| <p>1. Look at the ideas in your response.</p> <ul style="list-style-type: none"><input type="checkbox"/> Have you focused on one main idea?<input type="checkbox"/> Have you used enough detail to explain yourself?<input type="checkbox"/> Have you put your thoughts in order?<input type="checkbox"/> Can others understand what you are saying? <p>2. Think about what you want others to know and feel after reading your paper.</p> <ul style="list-style-type: none"><input type="checkbox"/> Will others understand how you think or feel about an idea?<input type="checkbox"/> Will others feel angry, sad, happy, surprised, or some other way about your response? (Hint: Make your reader feel like you do about your paper's subject.)<input type="checkbox"/> Do you have sentences of different lengths? (Hint: Be sure you have a variety of sentence lengths.) | <ul style="list-style-type: none"><input type="checkbox"/> Are your sentences alike? (Hint: Use different kinds of sentences.) <p>3. Look at the words you have used.</p> <ul style="list-style-type: none"><input type="checkbox"/> Have you described things, places and people the way they are? (Hint: Use enough detail.)<input type="checkbox"/> Are you the same person all the way through your paper? (Hint: Check your verbs and pronouns.)<input type="checkbox"/> Have you used the right words in the right places? <p>4. Look at your handwriting.</p> <ul style="list-style-type: none"><input type="checkbox"/> Can others read your handwriting with no trouble? |
|--|---|

Domain Scoring Rubric

Content (C)

The Content domain includes the focusing, structuring, and elaborating that a writer does to construct an effective message for a reader. It is the creation of a product, the building of a composition intended to be read. The writer crafts his/her message for the reader by focusing on a central idea, providing elaboration of the central idea, and delivering the central idea and its elaboration in an organized text. Features are:

- Central idea
- Elaboration
- Unity
- Organization

Style (S)

The Style domain comprises those features that show the writer purposefully shaping and controlling language to affect readers. This domain focuses on the vividness, specificity, and rhythm of the piece and the writer's attitude and presence. Features are:

- Selected vocabulary
- Sentence variety
- Tone
- Voice
- Selected information

Sentence Formation (F)

The Sentence Formation domain reflects the writer's ability to form competent, appropriately mature sentences to express his/her thoughts. Features are:

- Completeness
- Absence of fused sentences
- Expansion through standard coordination and modifiers
- Embedding through standard subordination and modifiers
- Standard word order

Usage (U)

The Usage domain comprises the writer's use of word-level features that cause written language to be acceptable and effective for standard discourse. Features are:

- Standard inflections
- Agreement
- Word meaning
- Conventions

Mechanics (M)

The Mechanics domain includes the system of symbols and cueing devices a writer uses to help readers make meaning. Features are:

- Capitalization
- Punctuation
- Formatting
- Spelling

Scoring Scale

Each domain is scored independently using the following scale.

4 =The writer demonstrates **consistent**, though not necessarily perfect, control* of almost all of the domain's features.

3 =The writer demonstrates **reasonable**, but not consistent, control* of most of the domain's features, indicating some weakness in the domain.

2 =The writer demonstrates **inconsistent** control* of several of the domain's features, indicating significant weakness in the domain.

1 =The writer demonstrates **little** or **no** control* of most of the domain's features.

*Control: The ability to use a given feature of written language effectively at the appropriate grade level. A response receives a higher score to the extent that it demonstrates control of the features in each domain.

The application of the scale, using actual student writing, is done with the assistance of a committee of Arkansas teachers, language arts supervisors, and representatives of the Arkansas Department of Education.

Nonscoreable and Blank Papers

Nonscoreable papers include student responses that are off-topic, illegible, incoherent, written in a language other than English, or too brief to assess. Nonscoreable papers will receive a score of "0." Blank papers indicate no response was written and will be reported as NA (no attempt), which translates into a score of "0."

1 Read the letter.

Dear Mr. Timothy,

We have enough teachers signed up to participate in the softball tournament. What we still lack is community involvement. We are asking that your company make a donation for uniforms or food. As you know, the donations received for the tournament will go to help build a new ballpark for our community. We have volunteers to cover all of the food booths, and we have sold a lot of tickets. Any help from your company will be greatly appreciated.

The purpose of the letter above is to

- A** describe a fundraising project for the community.
- B** inform a company about a fundraising project.
- * **C** persuade a company to participate in a fundraising project.
- D** entertain the community with a fundraising project.

2 Chris is writing the following descriptive narrative.

¹Aaron and Lorie were anxious to help their grandmother, so they carried her heavy luggage from the bus to the car. ²_____, they managed to lift the suitcases into the trunk. ³They were proud to show how strong they were.

Which phrase added to the blank in sentence 2 uses onomatopoeia effectively?

- * **A** Huffing and puffing
- B** Hissing and snorting
- C** Trying their best
- D** Flexing their muscles

- 3** Which sentence contains an error in spelling?
- A** Del's family is going to attend his brother's graduation in June.
 - B** The principal will talk about leadership and good citizenship.
 - C** Someone must take pictures that capture the enthusiasm on the graduates' faces.
 - * **D** The school is fortunate that one of the teachers is a professionall photographer.

- 4** Read the paragraph.

¹Gordon began to take pictures of butterflies when he was a young child. ²His photos captured these beautiful insects resting on flowers and flying between bushes. ³_____, when he heard there was a photography contest for nature photos, he entered.

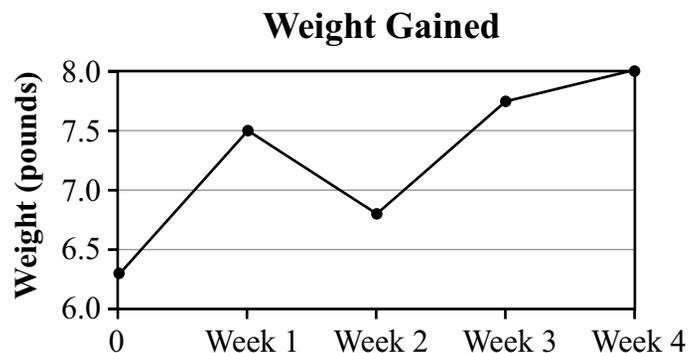
Which transition **best** completes the third sentence?

- A** However
- B** Especially
- * **C** Therefore
- D** Additionally

CALCULATOR NOT PERMITTED—ITEMS 1–6



- 1 The line graph below shows the amount of weight gained by Mrs. Andrew's baby in the first weeks after birth.



During which week did the baby's weight increase the most?

- * **A** Week 1
- B** Week 2
- C** Week 3
- D** Week 4

- 2** Logan compared the batting averages of players on the baseball team. Four of the players' averages are shown below.

Kyle, 0.323

Ryan, 0.319

Carlos, 0.299

Jack, 0.324

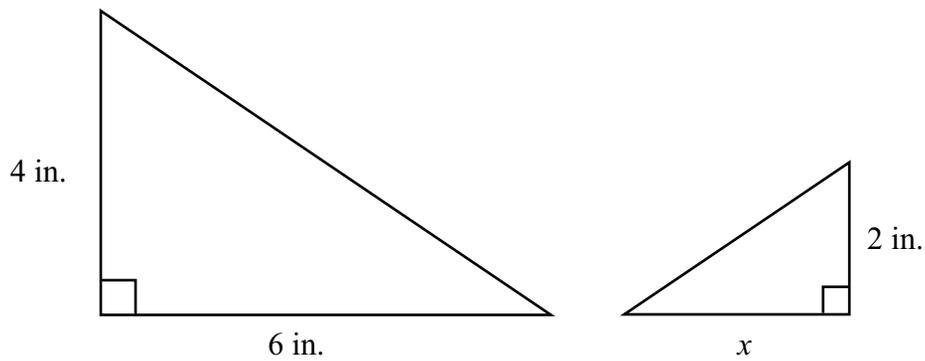
Which of the following lists the players from the greatest average to the least?

- A** Kyle, Jack, Ryan, Carlos
- * **B** Jack, Kyle, Ryan, Carlos
- C** Carlos, Ryan, Kyle, Jack
- D** Jack, Kyle, Carlos, Ryan

- 3** Jed wants to collect information to compare the average weight of horses to the average weight of cows. Which of the following is the **best** way for Jed to collect the information?

- A** Survey local farmers about the weights of their horses.
- B** Survey local farmers about the weights of their cows.
- C** Survey local farmers about the weights of all of their animals.
- * **D** Survey local farmers about the weights of their cows and their horses.

- 4 Two similar figures are shown below.



In the smaller triangle, what is the length of side x ?

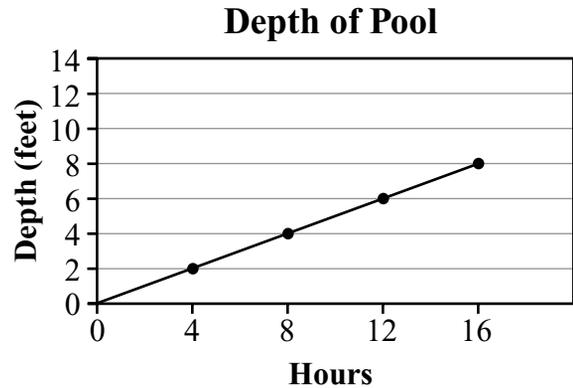
- A 2 inches
- * B 3 inches
- C 4 inches
- D 6 inches

- 5 What should you do to find the missing value in the equation below?

$$\boxed{?} - 128 = 1,782$$

- * **A** Add 128 to both sides of the equation.
- B** Divide both sides of the equation by 128.
- C** Multiply both sides of the equation by 128.
- D** Subtract 128 from both sides of the equation.

- 6 The line graph below shows the water depth of a swimming pool as it filled over 16 hours.



How deep was the water after 10 hours?

- A** 4 feet
- B** $4\frac{1}{2}$ feet
- * **C** 5 feet
- D** 6 feet

CALCULATOR PERMITTED—ITEMS 7–20 and A–C



- 7** Kelly played a game 5 times and recorded her scores in the table below.

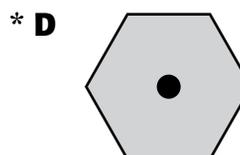
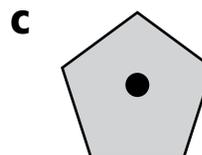
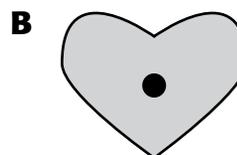
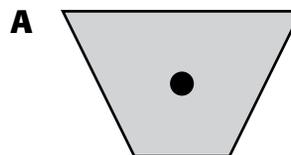
Kelly's Scores

Game	Score
1	32
2	33
3	34
4	28
5	28

What is the mean of her scores?

- A** 28
- * **B** 31
- C** 32
- D** 34

- 8** Which figure has 180° rotational symmetry about its center point?



- 9 Four students raced remote-control cars. They each made a table of their car's motion. Which table shows the car that had a constant rate of speed?

* **A**

Time Elapsed (seconds)	Total Distance (inches)
5	15
10	30
15	45
20	60

B

Time Elapsed (seconds)	Total Distance (inches)
5	15
10	20
15	25
20	30

C

Time Elapsed (seconds)	Total Distance (inches)
5	10
10	20
15	40
20	80

D

Time Elapsed (seconds)	Total Distance (inches)
5	10
10	25
15	45
20	70

10 Don made \$108 for working a certain number of hours. If h represents the number of hours Don worked, which shows the amount of money Don made per hour?

A $h = 108$

B $108 \times h$

C $\frac{h}{108}$

*** D** $\frac{108}{h}$

11 Montel left on a kayak trip at 10:30 A.M. He stopped kayaking at 2:00 P.M. How long was Montel kayaking?

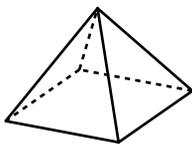
A $2\frac{1}{2}$ hours

B 3 hours

*** C** $3\frac{1}{2}$ hours

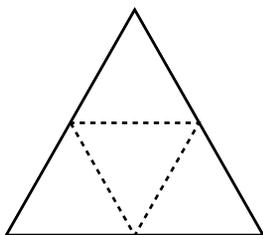
D 4 hours

- 12** Miranda is studying the ancient pyramids. She is making models from cardboard like the one shown below.

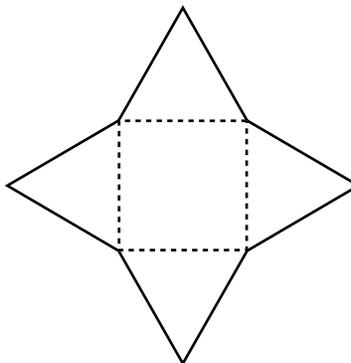


Which of the following can Miranda use as a pattern to make her models?

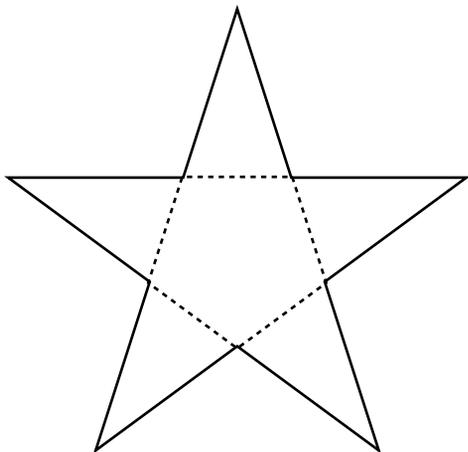
A



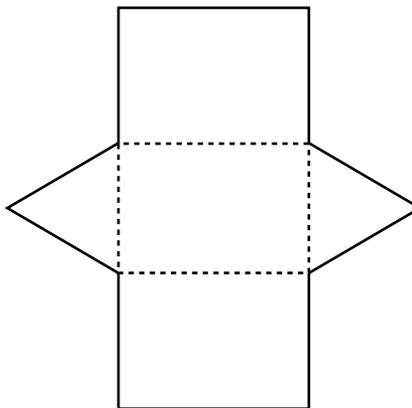
*** B**



C



D



13 Which of the following units would be **best** for measuring the amount of water in a birdbath?

- * **A** quarts
- B** kiloliters
- C** milliliters
- D** tablespoons

14 Which percentage equals the amount of candy Julie ate if she ate $\frac{6}{10}$ of a box?

- A** 10%
- B** 16%
- C** 40%
- * **D** 60%

- 15 Prices for a dog-walking service are shown.

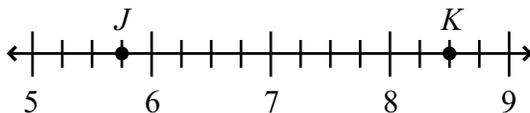
Prices for Dog-Walking Service

Time (in minutes)	Price of Walking 1 Dog (in dollars)	Price of Walking 2 Dogs (in dollars)
15	16	24
30	20	30
45	24	?
60	28	42

What is the price for walking 2 dogs for 45 minutes?

- A** \$32
B \$34
 * **C** \$36
D \$38

- 16 What is the distance between point J and point K on the number line below?



- * **A** $2\frac{3}{4}$ units
B 3 units
C $3\frac{1}{4}$ units
D $3\frac{1}{2}$ units

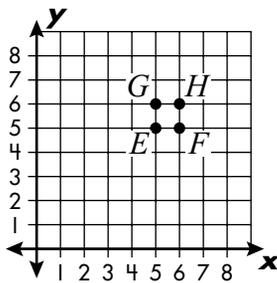
- 17 Keith wants to survey the students and teachers in his school. He wants to see which month people prefer to have their vacation. He also wants to know if there is a difference between student preferences and teacher preferences. Which of the following types of graphs is **best** for Keith to use to display the data?

- A** bar graph
B circle graph
C double line graph
 * **D** double bar graph

18 Candice wants to buy colored art pens that cost \$0.75 each. What is the greatest number of these colored art pens that Candice can purchase with \$10.50?

- A** 10
- B** 12
- * **C** 14
- D** 16

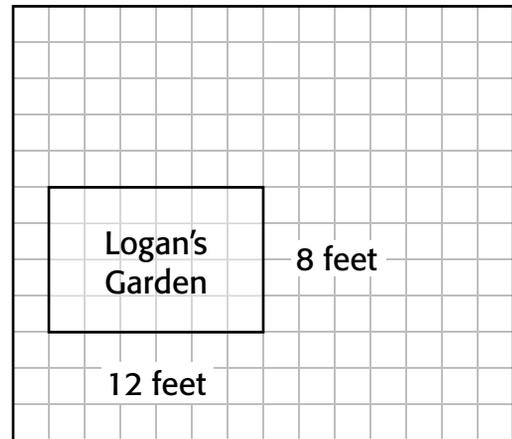
19 Points are shown on the coordinate grid below.



Which point is at (5, 6) on the grid?

- A** *E*
- B** *F*
- * **C** *G*
- D** *H*

20 Logan has a garden with a length of 12 feet and a width of 8 feet.



If Logan doubles the length and triples the width of the garden, how many square feet larger will the area of the garden be?

- A** 576
- * **B** 480
- C** 96
- D** 56

Mathematics Item A—2012 Grade 6
--

- A** Cheyenne counted the eggs the chickens laid on her aunt’s farm last week. The numbers are shown below.

14, 18, 11, 1, 13, 16, 18

1. Find the mean, median, mode, and range of the data set. Which of these measures is the greatest for the set of data? Show your work or explain your answer.
2. Cheyenne noticed that the day she counted 1 egg it was very cold. If she deleted that number from the data set, which measure would change the most? Show your work or explain your answer.

BE SURE TO LABEL YOUR RESPONSES 1 AND 2.

Mathematics Item A Scoring Rubric—2012 Grade 6

Score	Description
4	The student earns 4 points. The response contains no incorrect work.
3	The student earns 3 - 3½ points.
2	The student earns 2 - 2½ points.
1	The student earns ½ - 1½ points, or some minimal understanding is shown.
0	The student earns 0 points. No understanding is shown.
B	Blank – No Response. A score of “B” will be reported as “NA.” (No attempt to answer the item. Score of “0” is assigned for the item.)

Solution and Scoring

Part	Points
1	<p>2 points possible:</p> <p>2 points: Correct answers: mean 13, mode 18, range 17, median 14 Correctly selects greatest: mode is greatest Correct procedure shown and/or explained for at least 2 answers. Give credit for the following or equivalent: Ex: mean = 13 $14+18+11+1+13+16+18=91$ $91\div 7=13$ Mode = 18 1,11,13,14,16,<u>18,18</u> 18 occurs the most Range=17 $18-1=17$ Median= 14 1,11,13,14,16,18,18 14 is the middle value</p> <p>OR</p> <p>1½ points: 2-3 correct answers, greatest value named based on these answers Correct procedure shown and/or explained for at least 2 answers.</p> <p>OR</p> <p>1 point: 2-3 correct answers, greatest value named based on these answers Procedure is incomplete, incorrect or missing.</p> <p>or</p> <p>2-3 correct answers, greatest value is not named Correct procedure shown and/or explained for at least 2 answers.</p> <p>or</p> <p>Less than 2 correct answers, greatest value is named Correct procedure shown and/or explained for at least 2 answers.</p> <p>OR</p> <p>½ point: 2-3 correct answers, greatest value is not named Procedure is incomplete, incorrect or missing.</p> <p>or</p> <p>Less than 2 correct answers, greatest value is named Procedure is incomplete, incorrect or missing.</p>

Part	Points
2	<p>2 points possible:</p> <p>2 points: Correct answer: Range Correct and complete procedure shown and/or explained. Give credit for the following or equivalent: Ex: mean = 15 $14+18+11+13+16+18=90 \quad 90 \div 6=15$ Mode = 18 $11,13,14,16,\underline{18},\underline{18}$ 18 occurs the most Range=7 $18-11=7$ Median= 15 $11,13,14,16,18,18$ $14+16=30 \quad 30 \div 2=15$ 15 is the middle value Mean changed 2, mode stayed the same, rangechanged 10, And median changed 2. Range had the greatest change.</p> <p>or</p> <p>Correct answer based on an incorrect answer in part 1. Correct procedure shown and/or explained.</p> <p>OR</p> <p>1½ points: Correct answer: Range Partial correct procedure shown and/or explained.</p> <p>or</p> <p>Correct answer: Range 4 correct values no procedure shown and/or explained.</p> <p>or</p> <p>Correct answer based on an incorrect answer in part 1. Partial correct procedure shown and/or explained.</p> <p>OR</p> <p>1 point: Correct answer: Range Procedure is incorrect or missing</p> <p>or</p> <p>Incorrect or missing answer 4 correct values no procedure shown and/or explained.</p> <p>or</p> <p>Correct answer based on an incorrect answer in part 1. Procedure is incorrect or missing.</p> <p>OR</p> <p>½ point: Incorrect or missing answer Partial correct procedure shown and/or explained.</p>

Mathematics Item B—2012 Grade 6
--

- B** Rick sells slices of homemade bread at a fundraiser. Each loaf of bread is cut into 8 equal slices. Rick wants to have at least 150 slices of bread available for sale.
1. What is the minimum number of loaves of bread Rick must have available? Show your work and/or explain your answer.
 2. Rick sells each slice of bread for \$0.85. For how much money does Rick sell an entire loaf of bread? Show your work and/or explain your answer.
 3. Rick calculates his profit as the amount he earns from selling the bread minus the amount he spends buying the ingredients for each loaf. Rick spends \$1.15 buying ingredients to make each loaf of bread. If Rick sells all of the slices from the number of loaves found in Part 1, what will be Rick's amount of profit? Show your work and/or explain your answer.

BE SURE TO LABEL YOUR RESPONSES 1, 2, AND 3.

Mathematics Item B Scoring Rubric—2012 Grade 6

Score	Description
4	The student earns 6 points. The response contains no incorrect work.
3	The student earns 4 - 5 points.
2	The student earns 2 - 3 points.
1	The student earns 1 point, or some minimal understanding is shown.
0	The student earns 0 points. No understanding is shown.
B	Blank – No Response. A score of “B” will be reported as “NA.” (No attempt to answer the item. Score of “0” is assigned for the item.)

Solution and Scoring

Part	Points
1	<p>2 points possible:</p> <p>2 points: Correct answer: 19 Correct and complete procedure shown and/or explained Give credit for the following or equivalent Ex: $150 \div 8 = 18.75$ 18.75 rounded to 19 whole loaves. Ex: The minimum number of loaves is 19 because 150 divided by 8 equals 18 with a remainder, so you need one more loaf or 19.</p> <p>OR</p> <p>1 point: Correct answer: 19 Procedure is incomplete, incorrect or missing</p> <p>or</p> <p>Answer is incorrect due to a calculation, counting or copy error. Correct procedure shown and/or explained.</p>
2	<p>2 points possible:</p> <p>2 points: Correct answer: \$6.80 Correct and complete procedure shown and/or explained Give credit for the following or equivalent Ex: $.85 \times 8 = 6.80$ Ex: Rick sells an entire loaf for \$6.80 because \$.85 times 8 equals \$6.80.</p> <p>OR</p> <p>1 point: Correct answer: \$6.80 Procedure is incomplete, incorrect or missing</p> <p>or</p> <p>Incorrect answer due calculation or copy error. Correct procedure shown and/or explained.</p>

Part	Points
3	<p>2 points possible:</p> <p>2 points: Correct answer: \$107.35 Correct and complete procedure shown and/or explained Give credit for the following or equivalent</p> <p>Ex: $19 \times 8 = 152$ $152 \times .85 = 129.20$ $1.15 \times 19 = 21.85$ $129.20 - 21.85 = 107.35$</p> <p>Ex: $19 \times 6.80 = 129.20$ $1.15 \times 19 = 21.85$ $129.20 - 21.85 = 107.35$</p> <p>Ex: 19 loaves times 8 slices equals 152 slices. 152 slices times .85 equals 129.20 in sales. 19 loaves times 1.15 equals 21.85 cost. 129.20 in sales minus 21.85 in cost equals 107.35 profit</p> <p>or</p> <p>Correct answer based on incorrect answer in Part 1 or Part 2. Correct procedure shown and/or explained.</p> <p>OR</p> <p>1 point: Correct answer: \$107.35 Procedure is incomplete, incorrect or missing</p> <p>or</p> <p>Correct answer based on incorrect answer in Part 1 or Part 2. Procedure is incomplete, incorrect or missing</p> <p>or</p> <p>Answer is incorrect due to a calculation, counting or copy error. Correct procedure shown and/or explained.</p> <p><i>Note: At the 4 level, correct units of \$ must be included in Parts 2 and 3.</i></p>

Mathematics Item C—2012 Grade 6
--

- C** For physical education class, students did timed runs.
1. Carol ran 2 miles in 16 minutes. How many feet is this? How many inches is this? Show your work or explain your answer.
 2. Carol is training for a 5-mile race. She is going to practice on a 440-yard track. How many laps should she run to go the entire 5 miles? Show your work or explain your answer.

BE SURE TO LABEL YOUR RESPONSES 1 AND 2.

Mathematics Item C Scoring Rubric—2012 Grade 6

Score	Description
4	The student earns 4 points. The response contains no incorrect work.
3	The student earns 3 - 3½ points.
2	The student earns 2 - 2½ points.
1	The student earns ½ - 1½ point, or some minimal understanding is shown.
0	The student earns 0 points. No understanding is shown.
B	Blank – No Response. A score of “B” will be reported as “NA.” (No attempt to answer the item. Score of “0” is assigned for the item.)

Solution and Scoring

Part	Points
1	<p>2 points possible:</p> <p>2 points: Correct answers: 10,560 (ft.) & 126,720 (in.) Correct procedures shown and/or explained Give credit for the following or equivalent: Ex. $5280 \times 2 = 10,560$ $10560 \times 12 = 126,720$</p> <p>OR</p> <p>1½ points: Correct answers: 10,560 (ft.) & 126,720 (in.) Correct procedure shown and/or explained for one answer.</p> <p>or</p> <p>One correct answer and 1 incorrect answer due to calculation or copy errors. Correct procedure shown and/or explained.</p> <p><i>Note: Answer in inches can be based on an incorrect answer in feet.</i></p> <p>OR</p> <p>1 point: Correct answers: 10,560 (ft.) & 126,720 (in.) Procedures are incomplete, incorrect or missing.</p> <p>or</p> <p>One correct answer. Correct procedure shown and/or explained</p> <p>or</p> <p>Incorrect answers due to calculation or copy errors. Correct procedures shown and/or explained</p> <p>OR</p> <p>½ point: One correct answers: 10,560 (ft.) or 126,720 (in.) Procedure is incomplete, incorrect or missing.</p> <p>or</p> <p>One incorrect answer due to calculation or copy errors Correct procedure shown and/or explained</p> <p><i>Note: Units are not needed but at a 4 level must be correct.</i></p>

Part	Points
2	<p>2 points possible:</p> <p>2 points: Correct answers: 20 (laps) Correct procedure shown and/or explained Give credit for the following or equivalent: Ex: 1 mile = 1760 yards $1760 \div 440 = 4$ laps in a mile $4 \text{ laps} \times 5 \text{ miles} = 20 \text{ laps}$</p> <p>Ex: $5280 \times 5 = 26,400$ feet in 5 miles $26,400 \div 3 = 8800$ yards in 5 miles $8800 \div 440 = 20$ laps</p> <p>OR</p> <p>1 point: Correct answers: 20 (laps) Procedure is incomplete, incorrect or missing.</p> <p>Or</p> <p>Incorrect answer due to calculation or copy errors Correct procedure shown and/or explained</p> <p><i>Note: Laps is not needed but at a 4 level must be correct.</i></p>

Copying this page is a breach of security.

Mathematics Reference Sheet Grade 6

Use the information below, as needed, to answer questions on the Mathematics test.

Square	Rectangle	Triangle	Parallelogram
Area = s^2 Perimeter = $4s$	Area = lw Perimeter = $2l + 2w$	Area = $\frac{1}{2}(b \times h)$ Perimeter = $a + b + c$	Area = bh Perimeter = $2a + 2b$

Miscellaneous Conversions

$$\pi \approx 3.14$$

$$1 \text{ foot} = 12 \text{ inches}$$

$$1 \text{ yard} = 3 \text{ feet}$$

$$1 \text{ mile} = 5,280 \text{ feet}$$

$$1 \text{ pound (lb)} = 16 \text{ ounces (oz)}$$

$$1 \text{ cup} = 8 \text{ ounces (oz)}$$

$$1 \text{ pint} = 2 \text{ cups}$$

$$1 \text{ quart} = 2 \text{ pints}$$

$$1 \text{ gallon} = 4 \text{ quarts}$$

$$1 \text{ kilogram} = 1000 \text{ grams}$$

$$1 \text{ meter} = 100 \text{ centimeters}$$

$$1 \text{ decimeter} = 10 \text{ centimeters}$$

$$1 \text{ centimeter} = 10 \text{ millimeters}$$

$$1 \text{ kilometer} = 1000 \text{ meters}$$

$$1 \text{ liter} = 1000 \text{ milliliters}$$

Unauthorized use, review, duplication, or
reproduction of this document is prohibited.
Arkansas Department of Education April 2011.



The Arkansas English Language Arts Curriculum Framework—Reading Strand*

Content Standards	Student Learning Expectations
<p>9. Comprehension: Students shall apply a variety of strategies to read and comprehend printed material.</p>	<ol style="list-style-type: none"> 1. Use previewing, activating prior knowledge, predicting content of text, formulating questions, and establishing purposes for reading. 5. Monitor comprehension in relation to questions generated. 6. Connect own background knowledge and personal experience to make inferences and to respond to new information presented in text. 7. Make inferences and draw conclusions about characters' traits and actions based on plot, setting, motives, and responses to other characters. 8. Analyze literary elements of character, plot, and setting. 9. Compare the actions, motives and appearance of characters in a work of fiction and discuss the importance of the contrasts to the plot or theme. 11. Use text information and background knowledge to draw conclusions and to make inferences (e.g., theme, etc.). 12. Identify main ideas and supporting evidence in short reading passages 13. Use the <i>text features</i> to locate and recall information, with emphasis on cue words and phrases. 14. Use knowledge of text structure(s) to enhance understanding with emphasis on cause/effect and compare/contrast. 17. Analyze information from the text, based on purpose and/or level of importance 18. Summarize the content of a text.
<p>10. Variety of Text: Students shall read, examine, and respond to a wide range of texts for a variety of purposes.</p>	<ol style="list-style-type: none"> 6. Use skimming and scanning to locate specific information or to develop a general overview. 7. Select informational sources appropriate for a given purpose. 10. Read a variety of literature, including historical fiction, autobiography, and realistic fiction. 13. Read and utilize functional/<i>practical texts</i>, including advertisements, slogans, brochures, and timelines.
<p>11. Vocabulary, Word Study, and Fluency: Students shall acquire and apply skills in vocabulary development and word analysis to be able to read fluently.</p>	<ol style="list-style-type: none"> 4. Use knowledge of root words and affixes and word relationships to determine meaning. 5. Use context to determine meaning of multiple meaning words.

* The Content Standards and Student Learning Expectations listed are those that specifically relate to the released and non-released test items in this booklet

Released Items for Reading*

Item	Strand	Content Standard	Student Learning Expectation
1	R	9	8
2	R	9	9
3	R	11	5
4	R	9	5
5	R	9	13
6	R	9	7
7	R	9	11
8	R	10	10
A	R	9	7
9	R	9	6
10	R	9	6
11	R	10	13
12	R	10	6
13	R	9	11
14	R	11	4
15	R	9	13
16	R	9	1
B	R	9	17

* Only the predominant Strand, Content Standard, and Student Learning Expectation are listed for the English Language Arts items.

Non-Released Items for Reading*

Strand	Content Standard	Student Learning Expectation
R	9	12
R	9	18
R	11	5
R	9	14
R	9	14
R	9	17
R	9	6
R	10	7
R	9	14

* Only the predominant Strand, Content Standard, and Student Learning Expectation are listed for the English Language Arts items.

The Arkansas English Language Arts Curriculum Framework—Writing Strand*

Content Standards	Student Learning Expectations
<p>4. Process: Students shall employ a wide range of strategies as they write, using the writing process appropriately.</p>	<p>11. Edit individually or in groups for appropriate grade-level conventions, within the following features:</p> <ul style="list-style-type: none"> • <i>Sentence formation</i> <ul style="list-style-type: none"> • Completeness • Absence of fused sentences • Expansion through standard coordination and modifiers • Embedding through standard subordination and modifiers • Standard word order • <i>Usage</i> <ul style="list-style-type: none"> • Standard inflections • Agreement • Word meaning • Conventions • <i>Mechanics</i> <ul style="list-style-type: none"> • Capitalization • Punctuation • Formatting • Spelling
<p>5. Purpose, Topics, Forms and Audiences: Students shall demonstrate competency in writing for a variety of purposes, topics, and audiences employing a wide range of forms.</p>	<p>1. Write to describe, to inform, to entertain, to explain, and to persuade.</p>
<p>6. Conventions: Students shall apply knowledge of Standard English conventions in written work.</p>	<p>5. Identify and correct fragments and run-ons. 8. Apply correct spelling to commonly misspelled words.</p>
<p>7. Craftsmanship: Students shall develop personal style and voice as they approach the craftsmanship of writing.</p>	<p>1. Use figurative language purposefully, such as onomatopoeia, to shape and control language to affect readers. 4. Use transition words/ phrases</p>

* The Content Standards and Student Learning Expectations listed are those that specifically relate to the released and non-released test items in this booklet

Released Items for Writing*

Item	Strand	Content Standard	Student Learning Expectation
1	W	5	1
2	W	7	1
3	W	4	11
4	W	7	4

* Only the predominant Strand, Content Standard, and Student Learning Expectation are listed for the Writing items.

Non-Released Items for Writing*

Strand	Content Standard	Student Learning Expectation
W	6	8
W	4	11
W	4	11
W	6	5

* Only the predominant Strand, Content Standard, and Student Learning Expectation are listed for the Writing items.

The Arkansas Mathematics Curriculum Framework*

Strands	Content Standards	Student Learning Expectations
1—Number and Operations (NO)	1. Number Sense: Students shall understand numbers, ways of representing numbers, relationships among numbers and number systems.	2. Find decimal and <i>percent equivalents</i> for proper fractions and explain why they represent the same value. 3. Round and compare decimals to a given <i>place value</i> including thousandths.
	2. Properties of Number Operations: Students shall understand meanings of operations and how they relate to one another.	3. Apply the addition, subtraction, multiplication and division properties of equality to one-step <i>equations with whole numbers</i> . 4. Apply rules (conventions) for <i>order of operations</i> to <i>whole numbers</i> with and without parentheses. 5. Model multiplication and division of fractions (including mixed numbers) and decimals using pictures and physical objects. Ex. weight, money and measuring cups.
	3. Numerical Operations and Estimation: Students shall compute fluently and make reasonable estimates.	1. Apply, with and without appropriate <i>technology, algorithms</i> with <i>computational fluency</i> to perform <i>whole number operations</i> (+, -, x, /). 2. Develop and analyze <i>algorithms</i> for computing with fractions (including mixed numbers) and decimals and demonstrate, with and without <i>technology, computational fluency</i> in their use and justify the solution. 3. Solve, with and without appropriate <i>technology</i> , multi-step problems using a variety of methods and tools (i.e., objects, mental computation, paper and pencil).
2—Algebra (A)	4. Patterns, Relations, and Functions: Students shall recognize, describe, and develop patterns, relations, and functions.	1. Solve problems by finding the next term or missing term in a <i>pattern or function table</i> using real world situations. 2. Interpret and write an <i>algebraic rule</i> for a one <i>operation function table</i> . Ex. $y = x + 3$
	5. Algebraic Representations: Students shall represent and analyze mathematical situations and structures using algebraic symbols.	1. Model, write and solve one-step <i>equations</i> by informal methods using manipulatives and appropriate <i>technology</i> . 2. Write simple <i>algebraic expressions</i> using appropriate operations (+, -, x, /) with one <i>variable</i> . 3. Evaluate <i>algebraic expressions</i> with one <i>variable</i> using appropriate properties and operations (+, -, x, /).
	6. Algebraic Models: Students shall develop and apply mathematical models to represent and understand quantitative relationships.	1. Complete, with and without appropriate <i>technology</i> , and interpret tables and <i>line graphs</i> that represent the relationship between two <i>variables</i> in <i>quadrant I</i> . Ex. time and distance
	7. Analysis of Change: Students shall analyze change in various contexts.	1. Identify and compare situations with constant or varying <i>rates</i> of change. Ex. a student's rate of growth each year is a varying rate, hourly wages is a constant rate

* The Content Standards and Student Learning Expectations listed are those that specifically relate to the released and non-released test items in this booklet

The Arkansas Mathematics Curriculum Framework* (continued)

Strands	Content Standards	Student Learning Expectations
3—Geometry (G)	8. Geometric Properties: Students shall analyze characteristics and properties of 2- and 3-dimensional geometric shapes and develop mathematical arguments about geometric relationships.	2. Investigate with manipulatives or grid paper what happens to the <i>perimeter</i> and <i>area</i> of a <i>two-dimensional</i> shape when the dimensions are changed. Ex. length of sides are doubled 3. Identify, describe, draw, and classify triangles as <i>equilateral</i> , <i>isosceles</i> , <i>scalene</i> , <i>right</i> , <i>acute</i> , <i>obtuse</i> , and <i>equiangular</i> . 4. Draw, label and determine relationships among the <i>radius</i> , <i>diameter</i> , <i>center</i> and <i>circumference</i> (e.g. <i>radius</i> is half the <i>diameter</i>) of a circle. 5. Identify <i>similar figures</i> and explore their properties.
	9. Transformation of Shapes: Students shall apply transformations and the use of symmetry to analyze mathematical situations	1. Identify and describe <i>line</i> and <i>rotational symmetry</i> in <i>two-dimensional</i> shapes, <i>patterns</i> and designs.
	10. Coordinate Geometry: Students shall specify locations and describe spatial relationships using coordinate geometry and other representational systems.	1. Use <i>ordered pairs</i> to plot points in <i>Quadrant I</i> . 2. Plot points that form the <i>vertices</i> of a geometric figure and draw, identify, and classify the figure.
	11. Visualization and Geometric Models: Students shall use visualization, spatial reasoning, and geometric modeling.	1. Identify <i>two-dimensional patterns (nets)</i> for <i>three-dimensional</i> solids, such as <i>prisms</i> , <i>pyramids</i> , <i>cylinders</i> , and <i>cones</i> .
4—Measurement (M)	12. Physical Attributes: Students shall use attributes and tools of measurement to describe and compare mathematical and real-world objects.	1. Identify and select appropriate units and tools from both systems to measure. Ex. angles with degrees, distance with feet/meters 2. Make conversions within the same measurement system in real world problems. Ex. hours to minutes to seconds, meters to centimeters, feet to inches, liters to milliliters, quarts to gallons, etc. 3. Compare and contrast the differences among linear units, square units, and cubic units.
	13. Systems of Measurement: Students shall identify and use units, systems, and processes of measurement.	1. Solve real world problems involving one <i>elapsed time</i> , counting forward and backward (calendar and clock). 2. Determine which unit of measure or measurement tool matches the context for a problem situation. 4. Establish and apply formulas to find <i>area</i> and <i>perimeter</i> of triangles, rectangles, and parallelograms. 5. Find the distance between two points on a number line.
5—Data Analysis and Probability (DAP)	14. Data Representation: Students shall formulate questions that can be addressed with data, and collect, organize, and display relevant data to answer them.	1. Formulate questions, design studies, and collect data about a characteristic shared by two populations or different characteristics within one population. 2. Collect data and select appropriate graphical representations to display the data including <i>Venn diagrams</i> . 3. Construct and interpret graphs, using correct scale, including <i>line graphs</i> and <i>double-bar graphs</i> .
	15. Data Analysis: Students shall select and use appropriate statistical methods to analyze data.	1. Interpret graphs such as <i>double line graphs</i> and <i>circle graphs</i> . 2. Compare and interpret information provided by measures of <i>central tendencies (mean, median and mode)</i> and <i>measures of spread (range)</i> .
	16. Inferences and Predictions: Students shall develop and evaluate inferences and predictions that are based on data.	1. Use observations about differences in data to make justifiable inferences.

* The Content Standards and Student Learning Expectations listed are those that specifically relate to the released and non-released test items in this booklet

Released Items for Mathematics*

Item	Strand	Content Standard	Student Learning Expectation
1	D	14	3
2	N	1	3
3	D	14	1
4	G	8	5
5	N	2	3
6	A	6	1
7	D	15	2
8	G	9	1
9	A	7	1
10	A	5	2
11	M	13	1
12	G	11	1
13	M	13	2
14	N	1	2
15	A	4	1
16	M	13	5
17	D	14	2
18	N	2	5
19	G	10	1
20	G	8	2
A	D	15	2
B	N	3	2
C	M	12	2

* Only the predominant Strand, Content Standard, and Student Learning Expectation are listed for the Mathematics items.

Non-Released Items for Mathematics*

Strand	Content Standard	Student Learning Expectation
M	12	3
G	8	3
A	6	1
G	10	2
A	5	1
D	14	3
G	8	4
A	4	2
M	12	2
N	2	4
A	4	2
G	10	2
M	13	4
M	12	1
A	4	1
A	5	3
N	3	3
N	3	3
N	3	2
D	16	1
D	15	1
N	3	1

* Only the predominant Strand, Content Standard, and Student Learning Expectation are listed for the Mathematics items.

ACTAAP

Arkansas Comprehensive Testing, Assessment, and Accountability Program

DEVELOPED FOR THE ARKANSAS DEPARTMENT OF EDUCATION, LITTLE ROCK, AR 72201

AR1202



QA110494