# Wisconsin Knowledge and Concepts Examinations
# Criterion-Referenced Test

# Released Item Book

# Mathematics

## Grade

# 4

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Wisconsin Knowledge and Concepts Examinations—Criterion-Referenced Test (WKCE-CRT)

# Released Item Book

## What are released items?

The items in this book are actual items from the fall 2005 state assessment, the Wisconsin Knowledge and Concepts Examinations—Criterion-Referenced Test (WKCE-CRT). These items will not be used again on the state assessment and may, therefore, be used in Wisconsin for professional development, improving instruction, and student practice. The items in this book illustrate the formats and kinds of items that students will encounter on the WKCE-CRT.

## How do I use this book?

### *Professional Development*

Released items are useful as educators engage in conversations about what students are expected to know and be able to do to demonstrate proficiency on the state assessments relative to the state model academic standards. Released items can inform discussions about state and local standards, curriculum, instruction, and assessment.

### *Improving Instruction*

Teachers may use released items in classroom activities that help students understand how to:

- solve problems
- determine which answer choices are correct, which are incorrect, and why
- respond to constructed response items with complete, thoughtful answers
- approach long and/or multi-step tasks
- use good test-taking strategies.

### *Student Practice*

Students may perform better and with less anxiety if they are familiar with the format of the test and with the types of items they will be required to answer. See the accompanying guide for instructions on administering the released item book as a practice test and for the answer key. Note that a student's score on the practice test cannot be converted to a scale score, used to predict performance on the operational WKCE-CRT, or used to make inferences about the student's learning.

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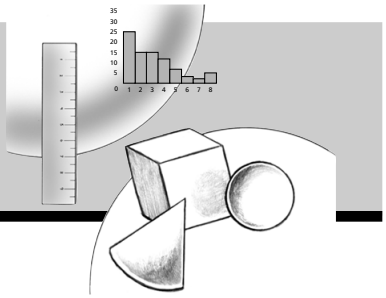
# Mathematics

## Session 1





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**1** Tonie has 383 pencils. She gives 9 pencils to her friend. How many pencils does Tonie have left?

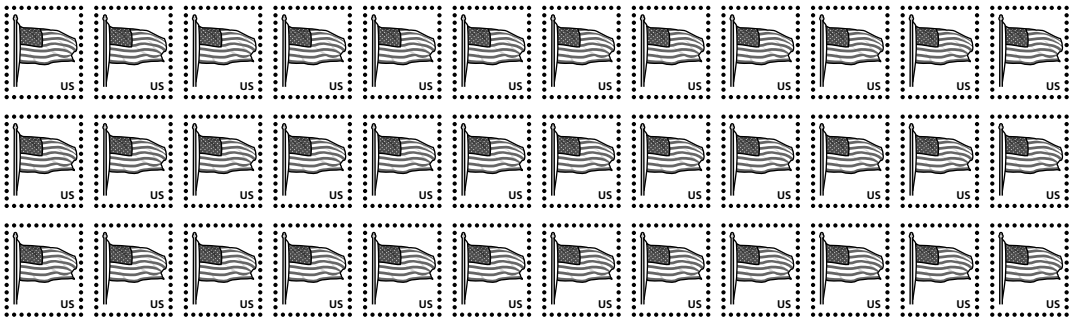
Ⓐ 374

Ⓑ 376

Ⓒ 384

Ⓓ 386

**2** Ethan has 36 stamps in his stamp collection.



If Ethan puts 9 stamps on each page of his stamp book, how many pages does he have?

Ⓐ 3

Ⓑ 4

Ⓒ 6

Ⓓ 9

Go On

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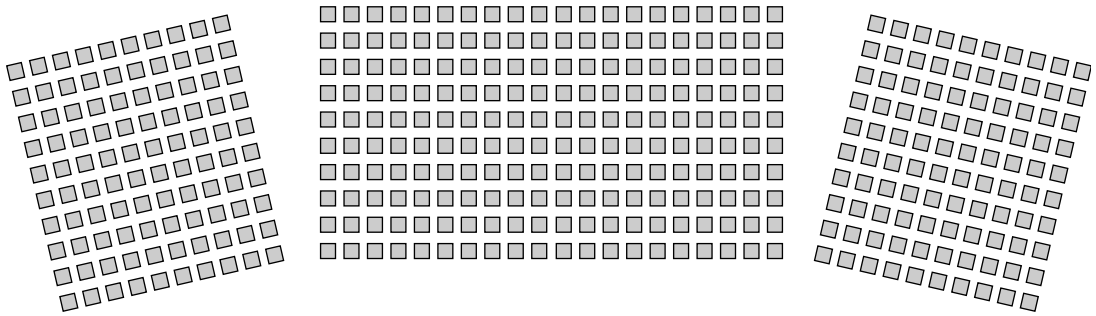
**3** A theater has 3 sections of seats. Section A and section C each have 10 rows of seats. Each row has 10 seats. Section B has 10 rows of seats, but each row has twice as many seats as section A.



A B C

**Step A**

How many seats does the theater have?

**Answer:** _____ seats

**Step B**

Use what you know about multiplication to explain how you found the number of seats in the theater.
Use words, numbers, and/or symbols in your answer.

_____

_____

_____

_____



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**4** The table below shows the number of star beads and moon beads that Taylor uses to make necklaces.

## Taylor's Necklaces

| Star Beads | Moon Beads |
|---|---|
| 13 | 5 |
| 17 | 9 |
| 25 | 17 |
| 34 | ? |

If Taylor makes a necklace that uses 34 star beads, how many moon beads does she use?

Ⓐ 21

Ⓑ 23

Ⓒ 25

Ⓓ 26

**5** Mr. Glaser has 4 children. He gave 6 dimes to each child. Which number sentence can be used to find the number of dimes Mr. Glaser gave his children?

Ⓐ $6 + 4 = \square$

Ⓑ $6 - 4 = \square$

Ⓒ $6 \times 4 = \square$

Ⓓ $6 \div 4 = \square$

STOP

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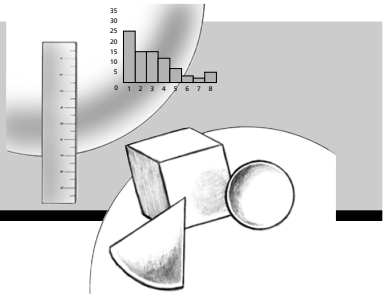
# Mathematics

## Session 2





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**6** Jenna found an odd number of shells. Which of these was the number of shells Jenna found?

Ⓐ 4

Ⓑ 8

Ⓒ 14

Ⓓ 17

**7** Tyler had four numbers. He used each number only once to make a larger number.

7 9 4 5

If Tyler put the 9 in the tens place, what would be the largest number he could make?

Ⓐ 7,954

Ⓑ 7,549

Ⓒ 7,594

Ⓓ 9,754

**8** Look at the pattern below.

| | | | | | |
|---|---|---|---|---|---|
| 275 | 280 | 285 | 290 | 295 | 300 |

What is the rule for the pattern?

Ⓐ counting by 5s

Ⓑ counting by 10s

Ⓒ counting by 25s

Ⓓ counting by 100s

**9** Anna bought 5 pencil erasers. Which of these is most likely the weight of Anna's pencil erasers?

Ⓐ 5 inches

Ⓑ 5 liters

Ⓒ 5 ounces

Ⓓ 5 pounds

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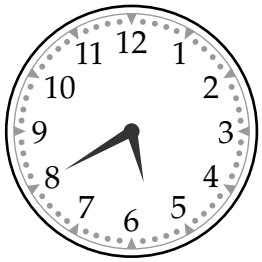
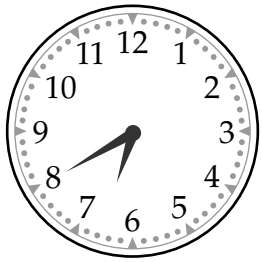
**10** Tiara's alarm clock is shown below.

Which clock shows the same time as Tiara's clock?

Ⓐ 

Ⓑ 

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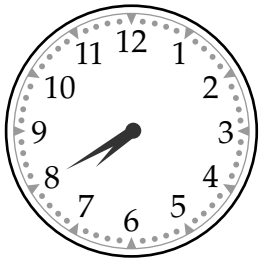
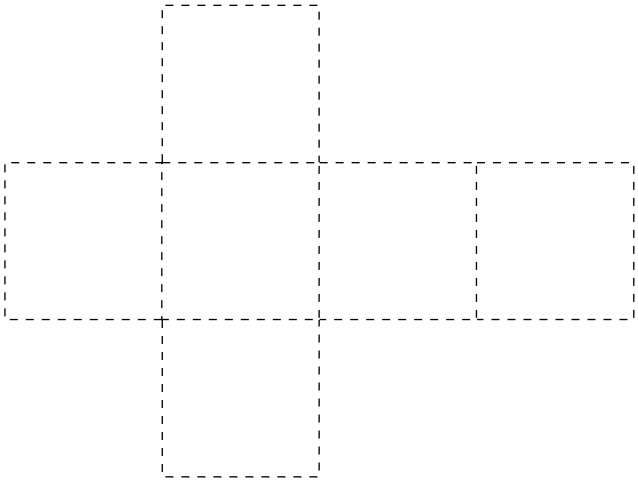
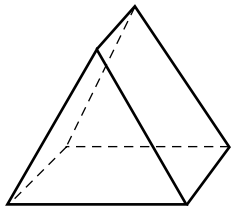
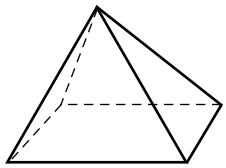
Ⓓ 

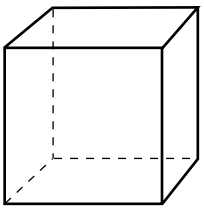
**11** Brandy made a shape by folding the cardboard below.

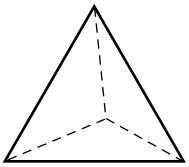


Which shape did Brandy make?

Ⓐ 

Ⓑ 

Ⓒ 

Ⓓ 



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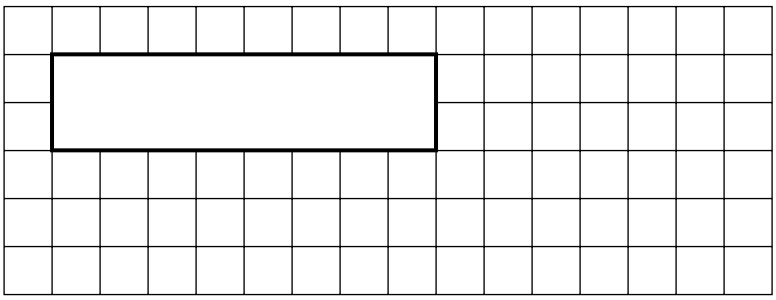
**12** Look at the rectangle on the grid below.



**Step A**

On the same grid, draw a square that covers the same amount of space as the rectangle shown. Use a heavy dark line to draw the square.

**Step B**

Use what you know about measurement to explain why the square you drew covers the same amount of space as the rectangle.
Use words, numbers, and/or symbols in your answer.

Go On

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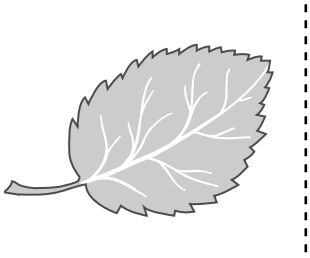
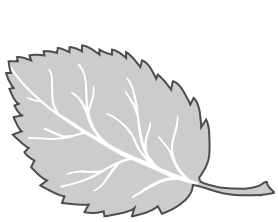
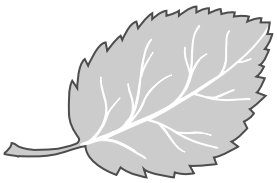
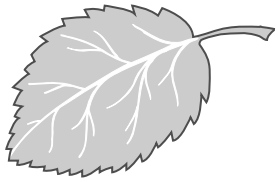
**13** Look at the picture of the leaf below.

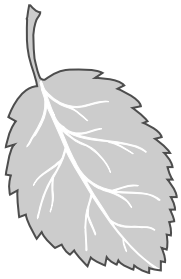


Which of these shows this leaf flipped over the line?

Ⓐ 

Ⓑ 

Ⓒ 

Ⓓ 



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**14** The tally chart below shows the number of cans David recycled each week.

## Recycling Cans

| Week | Number of Cans |
|---|---|
| 1 | 𝍸 𝍸 |
| 2 | 𝍸 𝍸 𝍸 \|\|\| |
| 3 | 𝍸 𝍸 \| |
| 4 | 𝍸 𝍸 \|\| |
| 5 | \|\|\|\| |

How many more cans did David recycle in Week 2 than in Week 5?

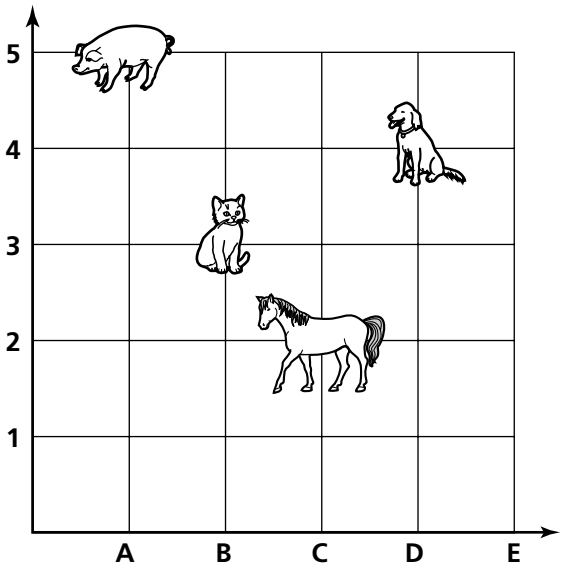
Ⓐ 11

Ⓑ 14

Ⓒ 15

Ⓓ 16

**15** The pictures of 4 animals are shown on the grid below.




Where is the cat located?

Ⓐ (B, 3)

Ⓑ (C, 3)

Ⓒ (B, 2)

Ⓓ (C, 2)

**16** Derek tosses a coin 10 times. Which of these is the most likely result of Derek's tosses?

Ⓐ 3 heads, 7 tails

Ⓑ 5 heads, 5 tails

Ⓒ 7 heads, 3 tails

Ⓓ 9 heads, 1 tails

Go On

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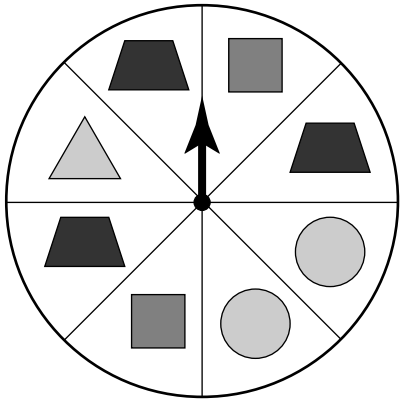
**17** The spinner below is divided into equal sections.



Lily spins the arrow once. On which shape will the arrow most likely land?

Ⓐ

Ⓑ

Ⓒ

Ⓓ



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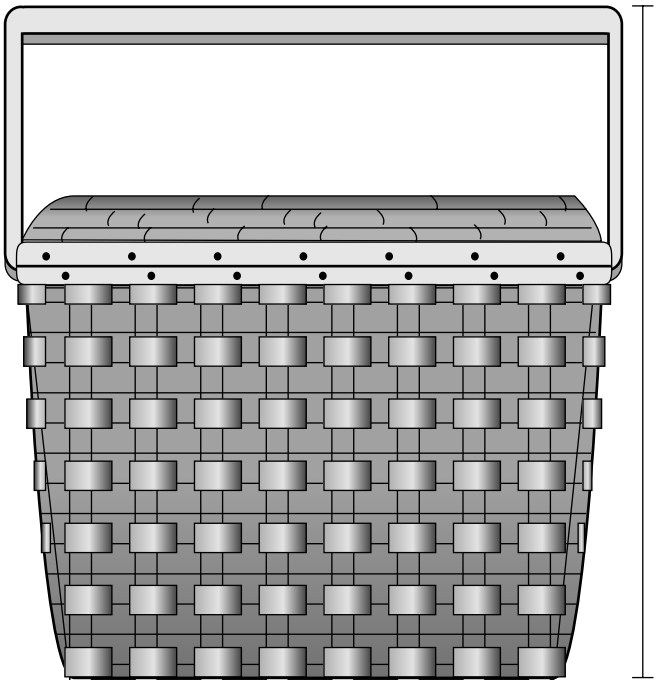
**18** Use the inch side of your ruler to help you solve this problem.



What is the height of the basket including the handle?

Ⓐ 3 inches

Ⓑ $3\frac{1}{2}$ inches

Ⓒ 4 inches

Ⓓ $4\frac{1}{2}$ inches

Go On

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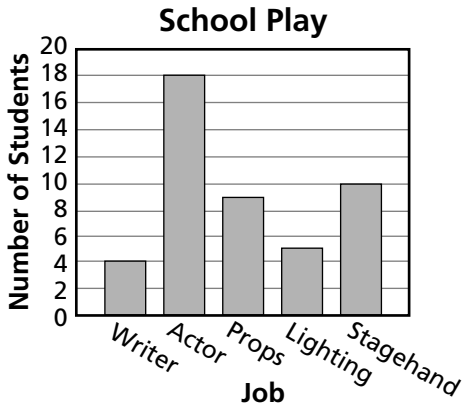
**19** The tally chart below shows the number of students who signed up for different jobs in a school play.

**School Play**

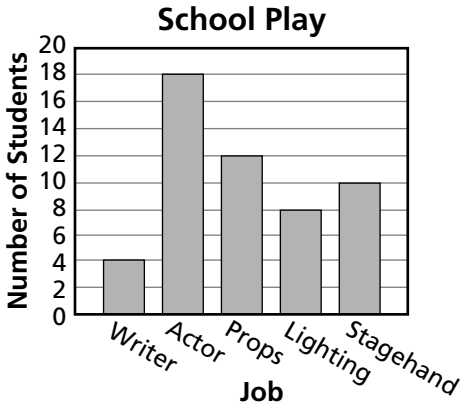
| Job | Number of Students |
|---|---|
| Writer | 𝍸 |
| Actor | 𝍸 𝍸 𝍸 \|\|\| |
| Props | 𝍸 𝍸 \| |
| Lighting | 𝍸 |
| Stagehand | 𝍸 𝍸 |

Which bar graph correctly shows the information in the tally chart?

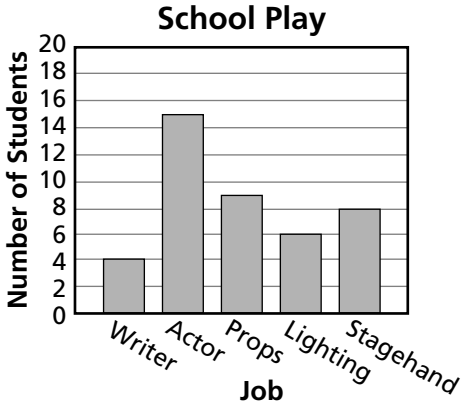
Ⓐ



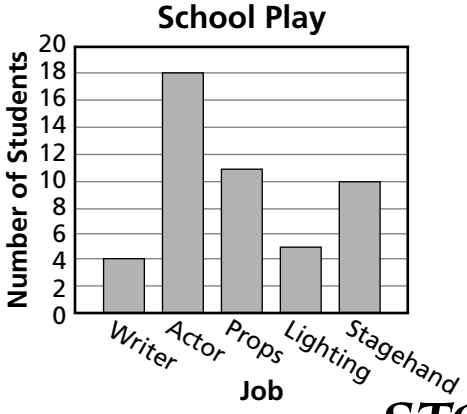

Ⓒ




Ⓑ




Ⓓ

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# Mathematics Grade 4 Released Item Book

Wisconsin Department of Public Instruction
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