

Colorado Measures of Academic Success



Grade 3 Mathematics



Paper Practice Resource for Students

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The Colorado Measures of Academic Success (CMAS) is Colorado’s standards-based assessment program designed to measure the Colorado Academic Standards (CAS) in the content areas of science, social studies, English language arts, and mathematics. The sample items included in this resource provide students with an opportunity to become familiar with the format of test items that appear in the paper-based test books.

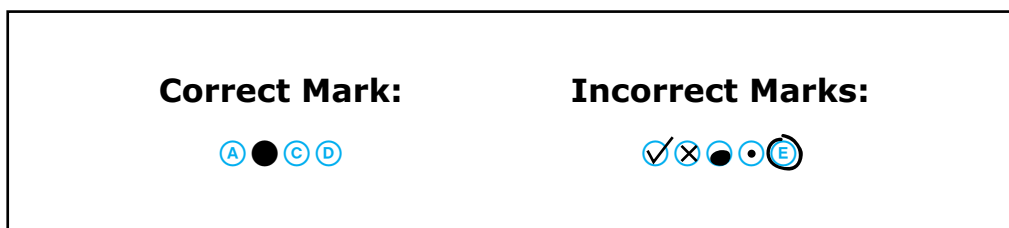
While the use of the sample items is not required, it is strongly encouraged to help ensure students are familiar with the types of items they may encounter while taking the paper-based test.

The sample item sets in the CMAS Practice Resources are not intended to be representative of a complete unit or test, nor are they intended to cover all assessed content or item types. To view assessment frameworks, high level blueprints, scoring rubrics, evidence statements and standards for the CMAS assessments, visit: https://www.cde.state.co.us/assessment/cmas_testdesign.

Item Types:

Selected Response Items

Selected response items are multiple choice questions. To respond, the student indicates their response in an answer grid or by filling in the circle(s) next to their answer choice.



Constructed Response Items

Constructed response items are questions or prompts that require an independent, written response. To respond, the student writes his or her answer in the response box in the test book.

Converted Online Technology-Enhanced Item Types

Online technology-enhanced items converted to the paper testing format may ask students to:

- Circle the correct answer
- Complete a table with checkmarks, Xs, or letters from a list of answer choices
- Fill in the blank
- Draw lines from boxes to correct answers
- Complete a bar graph or histogram
- Interact with a number line
- Graph points and lines on a coordinate grid
- Divide and shade shapes to indicate fractions

Directions for Completing the Answer Grids

1. Work the problem and find an answer.
2. Write your answer in the boxes at the top of the grid.
3. Print only one number or symbol in each box. Do not leave a blank box in the middle of an answer.
4. Under each box, fill in the circle that matches the number or symbol you wrote above. Make a solid mark that completely fills the circle.
5. Do not fill in a circle under an unused box.
6. See below for examples on how to correctly complete an answer grid.

EXAMPLES

To answer 632 in a question, fill in the answer grid as shown below.

6	3	2			
0	0	0	0	0	0
1	1	1	1	1	1
2	2	●	2	2	2
3	●	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
●	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

A brick path has 10 rows of 4 bricks. How many bricks are in the path?

Enter your answer in the box.

4	0				
0	●	0	0	0	0
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
●	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

ITEM SET 1

1. Find the missing length, width, or perimeter for each rectangle in the table.

Write a number from the list in each blank.

	Length (inches)	Width (inches)	Perimeter (inches)
Rectangle A	4	3	<input type="text"/>
Rectangle B	<input type="text"/>	8	20
Rectangle C	3	<input type="text"/>	16

**TURN THE PAGE AND
CONTINUE WORKING**

Use the information provided to answer Part A and Part B for question 2.

A teacher is making a rectangular reading space for students in a classroom.

2. Part A

There are three different ways the teacher can make the reading space. The table is missing some of the information needed.

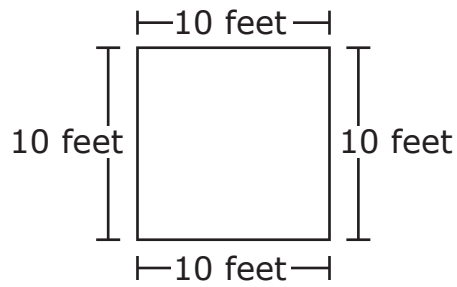
Write a number from the list shown into each spot on the table. Each number may be used once, more than once, or not at all.

4	7	8	13	27	42
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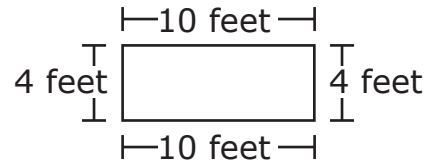
	Length (feet)	Width (feet)	Area (square feet)
Reading Space 1	<input type="text"/>	9	36
Reading Space 2	7	6	<input type="text"/>
Reading Space 3	8	<input type="text"/>	64

Part B

The students make two different drawings of a reading space. The students think each reading space has an area of 40 square feet.



Drawing 1



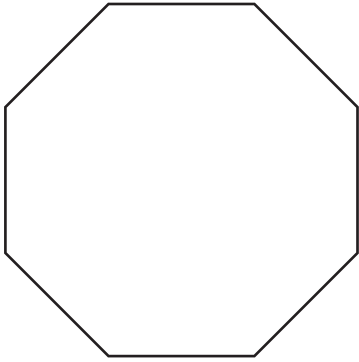
Drawing 2

- Explain whether each drawing shows an area of 40 square feet.
- Explain a different way the reading space can have an area of 40 square feet.

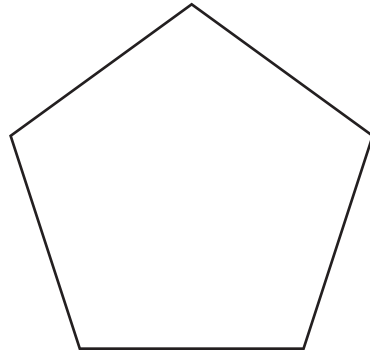
Enter your explanations in the space provided.

3. Which shape is a quadrilateral?

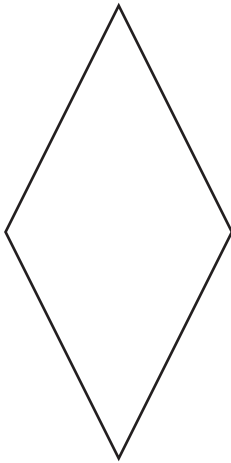
(A)



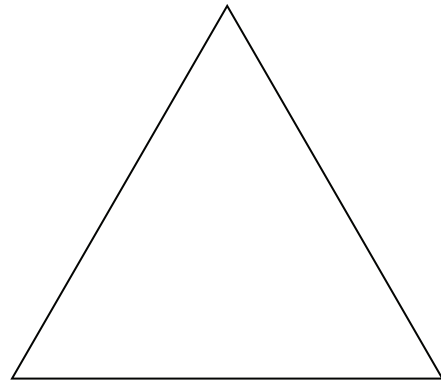
(B)



(C)



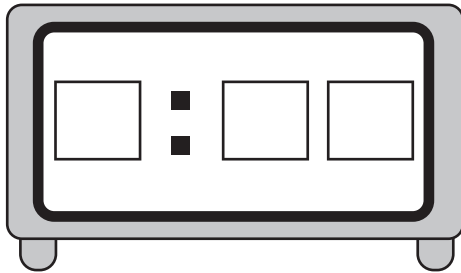
(D)



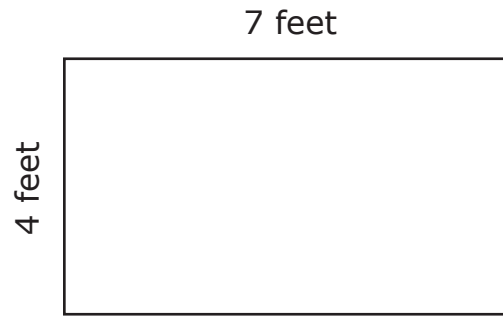
4. A student practices the piano for 35 minutes. He starts practice at 6:15.

What time will he end practice?

Write a number from the list in each blank to show the correct end time on the clock. Each number may be used once, more than once, or not at all.



5. The diagram shows a rectangular tabletop.



What is the area, in square feet, of the tabletop?

Enter your answer in the box.

0	0	0	0	0	0
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

6. What could the expression $27 \div 3$ stand for?

- A There are 3 cows that leave a group of 27 cows.
- B There are 3 cows that join a group of 27 cows.
- C There are 27 groups with 3 cows each.
- D There are 27 cows in 3 equal groups.

**TURN THE PAGE AND
CONTINUE WORKING**

Use the information provided to answer Part A and Part B for question 7.

A worker puts together baskets of fruit. He has a total of 63 pieces of fruit. He places 7 pieces of fruit in each basket.

7. Part A

There are 3 oranges in each basket. How many oranges are there in total?

Enter your answer in the box.

0	0	0	0	0	0
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

Part B

The worker sells 2 baskets of fruit. How many pieces of fruit does the worker have left in the remaining baskets?

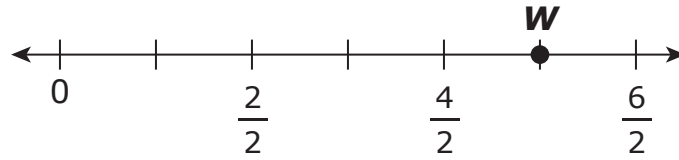
Enter your answer in the box.

0	0	0	0	0	0
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

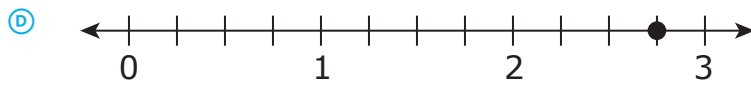
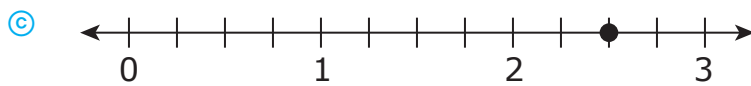
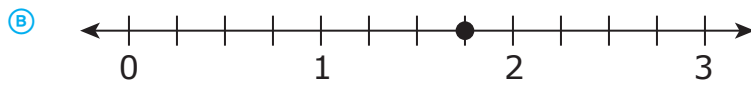
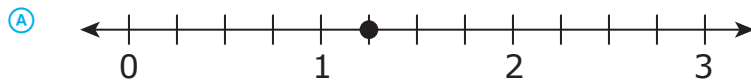
8. What is the value of $537 - 368$?

- (A) 169
- (B) 179
- (C) 249
- (D) 269

9. Point W is shown at $\frac{5}{2}$ on the number line.



Which number line shows a fraction equivalent to $\frac{5}{2}$?



This is the end of Item Set 1.

