



NEW MEXICO MEASURES  
OF STUDENT SUCCESS AND  
ACHIEVEMENT



**NM-MSSA**

# Mathematics

## Grade 3 · Practice Test

Print Student Name





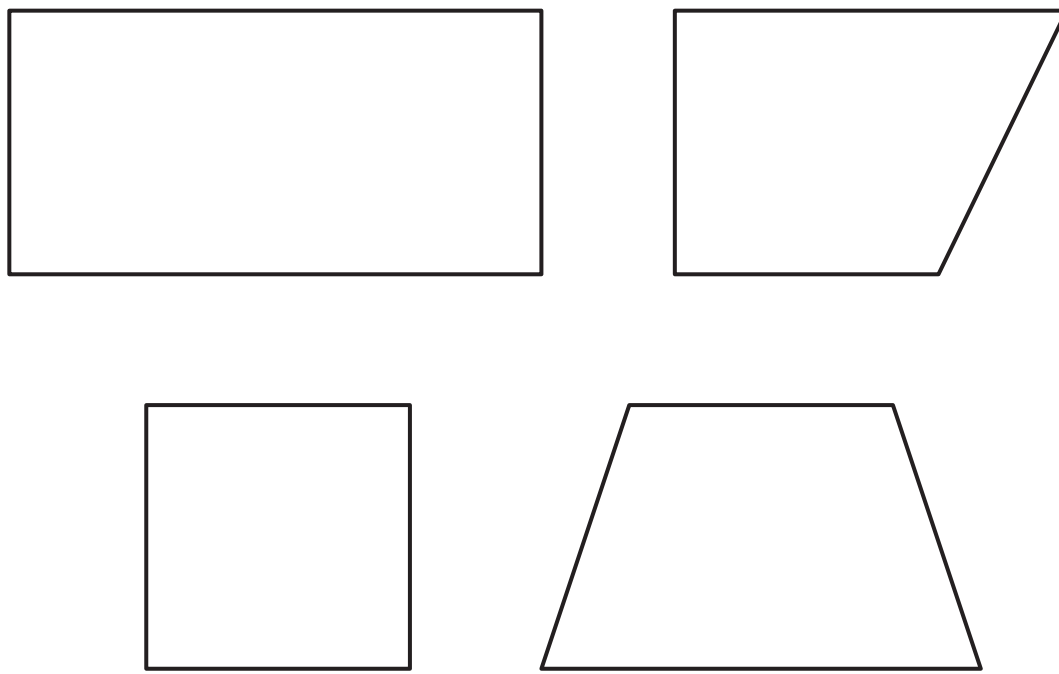
Copyright © 2021 by New Mexico Public Education Department  
All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from the copyright owner. Portions of this work were previously published. Printed in the United States of America.

# Mathematics Session 1

## DIRECTIONS

Today you will take a test in mathematics. For this test, you will answer different types of questions. Some of the questions may look different from test questions you have seen before, and some may ask about material that is new to you, but it is important to do your best. If you are not sure of the answer to a question, you should still try to answer it. You may NOT use a calculator to answer the questions in this session.

1. Look at these shapes.

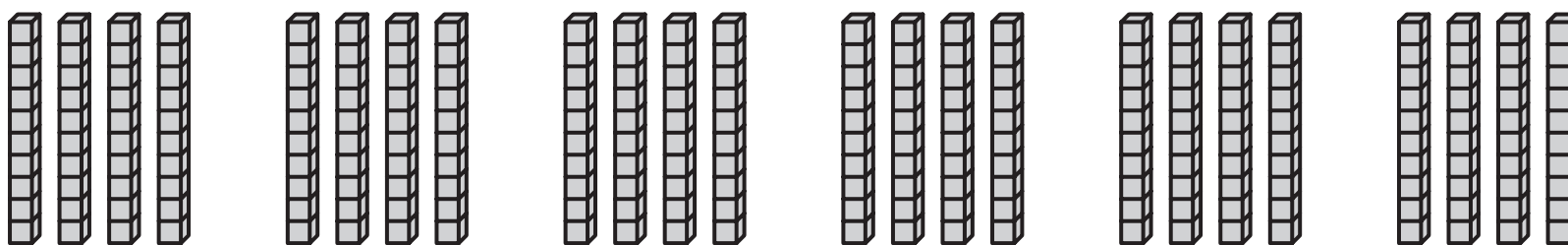


Which name tells about **all** the shapes in this group?

- Ⓐ rhombus
- Ⓑ rectangle
- Ⓒ quadrilateral
- Ⓓ parallelogram

GO ON →

2. A model with base ten blocks is shown.

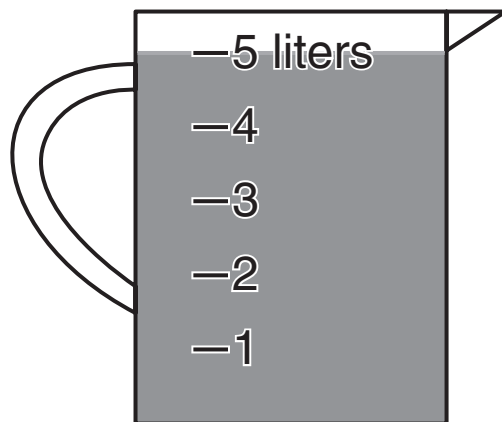


Which equation does this model show?

- Ⓐ  $4 \times 60 = 240$
- Ⓑ  $6 \times 40 = 240$
- Ⓒ  $4 \times 50 = 200$
- Ⓓ  $5 \times 40 = 200$
3. Ms. Smith has 4 fish tanks. There are 9 fish in each tank. Which number sentence can be used to find how many fish Ms. Smith has in all?

- Ⓐ  $4 + \square = 9$
- Ⓑ  $4 + 9 = \square$
- Ⓒ  $4 \times \square = 9$
- Ⓓ  $4 \times 9 = \square$

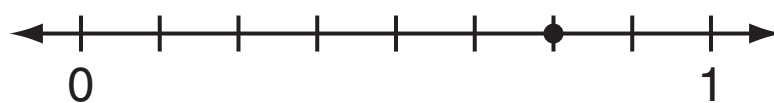
4. Alex brought this amount of punch to the class party.



Alex's classmates drank 3 liters of punch at the party.

How many liters of punch were left after the party?

- Ⓐ 2 liters
  - Ⓑ 3 liters
  - Ⓒ 5 liters
  - Ⓓ 8 liters
5. Danny collects football cards and baseball cards. He put a point on this number line to show the fraction of his cards that are football cards.



Based on the number line, which could be true?

- Ⓐ Danny has 6 football cards and 2 baseball cards.
- Ⓑ Danny has 8 football cards and 2 baseball cards.
- Ⓒ Danny has 2 football cards and 6 baseball cards.
- Ⓓ Danny has 2 football cards and 8 baseball cards.

6. Kato sees 2 colors of paper plates at the store. There are 4 packs of plates of each color. Each pack has 50 plates.

Kato knows to find the total number of paper plates on the shelf he needs to multiply  $2 \times 4 \times 50$ .

Select **two** other ways that can be used to find the total number of paper plates.

- Ⓐ  $2 \times 4 \times 5 \times 10$
- Ⓑ  $2 \times 4 \times 5 + 10$
- Ⓒ  $2 + 4 \times 5 + 10$
- Ⓓ 50, 100, 150, 200, 250, 300
- Ⓔ 50, 100, 150, 200, 250, 300, 350, 400

*This question has two parts. Be sure to answer all parts of the question.*

- 7.** A pet store has 150 fish in tanks. Each tank has 30 fish.
- a. Write a multiplication equation that can be used to find the number of fish tanks at the pet store.

- b. How many fish tanks are at the pet store?

8. Since  $3 \times 6 = 18$ , what is  $6 \times 3$ ?

- Ⓐ 9
- Ⓑ 18
- Ⓒ 36
- Ⓓ 81

9. Danielle is going to add  $312 + 285$ .

Which plan should Danielle use to add the numbers?

- Ⓐ She should add 15 to both numbers. Then find the sum.
- Ⓑ She should subtract 12 from both numbers. Then find the sum.
- Ⓒ She should subtract 12 from the first number and add 15 to the second number. Then find the sum.
- Ⓓ She should subtract 12 from the first number and add 12 to the second number. Then find the sum.

10. Which expression shows another way to find  $4 \times 3 \times 2$ ?

- Ⓐ  $4 \times 5$
- Ⓑ  $12 \times 2$
- Ⓒ  $7 \times 2$
- Ⓓ  $12 \times 5$



11. Look at this problem.

Cami made a bracelet one week. Each week after that, she made 1 more bracelet than the week before. How many bracelets did Cami have after 6 weeks?

To solve this problem, Maretta decided to make a table. Maretta’s answer to the problem was 20 bracelets.

Week	Total Number of Bracelets
1	1
2	2
3	5
4	9
5	14
6	20

Maretta made a mistake. What mistake did Maretta make?

- Ⓐ Maretta needed to add 1 bracelet each week, so Cami made 6 bracelets in all.
- Ⓑ In week 2, Maretta added 1 instead of 2 to the total from the week before.
- Ⓒ Each week Maretta needed to add 6 bracelets to the total number of bracelets.
- Ⓓ In week 5, Maretta needed to double the number of bracelets from week 4.

12. Jacob bought red balloons, white balloons, and blue balloons. He bought 8 red balloons and 12 white balloons. He bought 2 times as many blue balloons as red balloons.

How many balloons did Jacob buy in all?

- Ⓐ 24
- Ⓑ 30
- Ⓒ 36
- Ⓓ 44

- 13.** There are 7 shelves in a bookcase. Each shelf has 8 books.

How many books are in the bookcase?

- Ⓐ 15
- Ⓑ 16
- Ⓒ 54
- Ⓓ 56

*This question has three parts. Be sure to answer all parts of the question.*

- 14.** Wyatt is having a party. He bought

- 3 packs of stickers,
- a cake for \$25,
- balloons for \$18, and
- party hats for \$10.

Each pack of stickers has 8 sheets of stickers. Wyatt will put the same number of sheets of stickers into each of 6 gift bags.

- a. How many sheets of stickers will Wyatt put into each gift bag? Show or explain how you got your answer.

Wyatt wants to make 4 more gift bags with the same number of sheets of stickers as he used for the first 6 gift bags.

- b. How many more packs of stickers does Wyatt need to buy? Show or explain how you got your answer.

Wyatt estimates he spent less than \$40 on the cake and balloons.

- c. Is Wyatt correct? If he is correct, use estimation to explain why Wyatt is correct. If he is **not** correct, use estimation to explain why Wyatt is not correct.

15. Bob and Carly are making number patterns.

- Bob starts with an odd number, then adds 3 to find the next number.
- Carly starts with an odd number, then adds 2 to find the next number.

What is true about the patterns?

- Ⓐ All of the new numbers in Bob's pattern will be odd.
- Ⓑ All of the new numbers in Bob's pattern will be even.
- Ⓒ All of the new numbers in Carly's pattern will be odd.
- Ⓓ All of the new numbers in Carly's pattern will be even.

16. Look at this number sentence.

$$1 \times 2 \times \boxed{?} = 10 \times 1 \times 2$$

What number belongs in the box?

- Ⓐ 2
- Ⓑ 5
- Ⓒ 10
- Ⓓ 20

17. On Friday, students at a school sold 236 tickets to the school play.

What is the total number of tickets sold rounded to **the nearest ten**?

- Ⓐ 200
- Ⓑ 230
- Ⓒ 235
- Ⓓ 240

18. Which fraction makes this number sentence true?

$$\frac{2}{4} < \square$$

Ⓐ  $\frac{2}{8}$

Ⓑ  $\frac{1}{4}$

Ⓒ  $\frac{2}{6}$

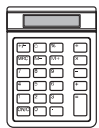
Ⓓ  $\frac{3}{4}$

THIS IS THE END OF THIS SESSION.  
DO NOT GO ON TO THE NEXT SESSION.



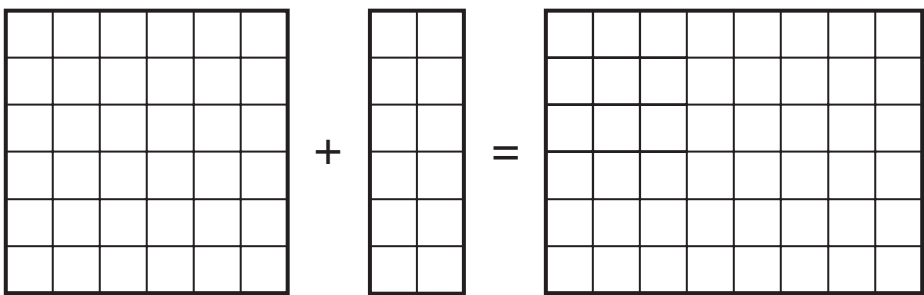
# Mathematics Session 2

## DIRECTIONS



Today you will take a test in mathematics. For this test, you will answer different types of questions. Some of the questions may look different from test questions you have seen before, and some may ask about material that is new to you, but it is important to do your best. If you are not sure of the answer to a question, you should still try to answer it. You MAY use a calculator to answer the questions in this session.

19. The rectangles in this model are covered with 1-inch squares.



The model shows the number sentence  $6 \times 6 + 6 \times 2 = \square$ .

What goes in the  $\square$  to make the number sentence true?

- (A)  $6 + (6 + 2)$
- (B)  $6 \times (6 \times 2)$
- (C)  $6 + (6 \times 2)$
- (D)  $6 \times (6 + 2)$



- 20.** Greta has 48 roses and 6 vases. She wants to put the same number of roses in each vase.

Which equation can Greta use to find how many roses to put in each vase?

Ⓐ  $6 \times \square = 48$

Ⓑ  $6 \times 48 = \square$

Ⓒ  $\square \div 48 = 6$

Ⓓ  $\square \div 6 = 48$

- 21.** A number line is shown.



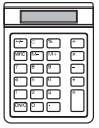
Which number is at the same point on the number line as  $\frac{3}{3}$ ?

Ⓐ 1

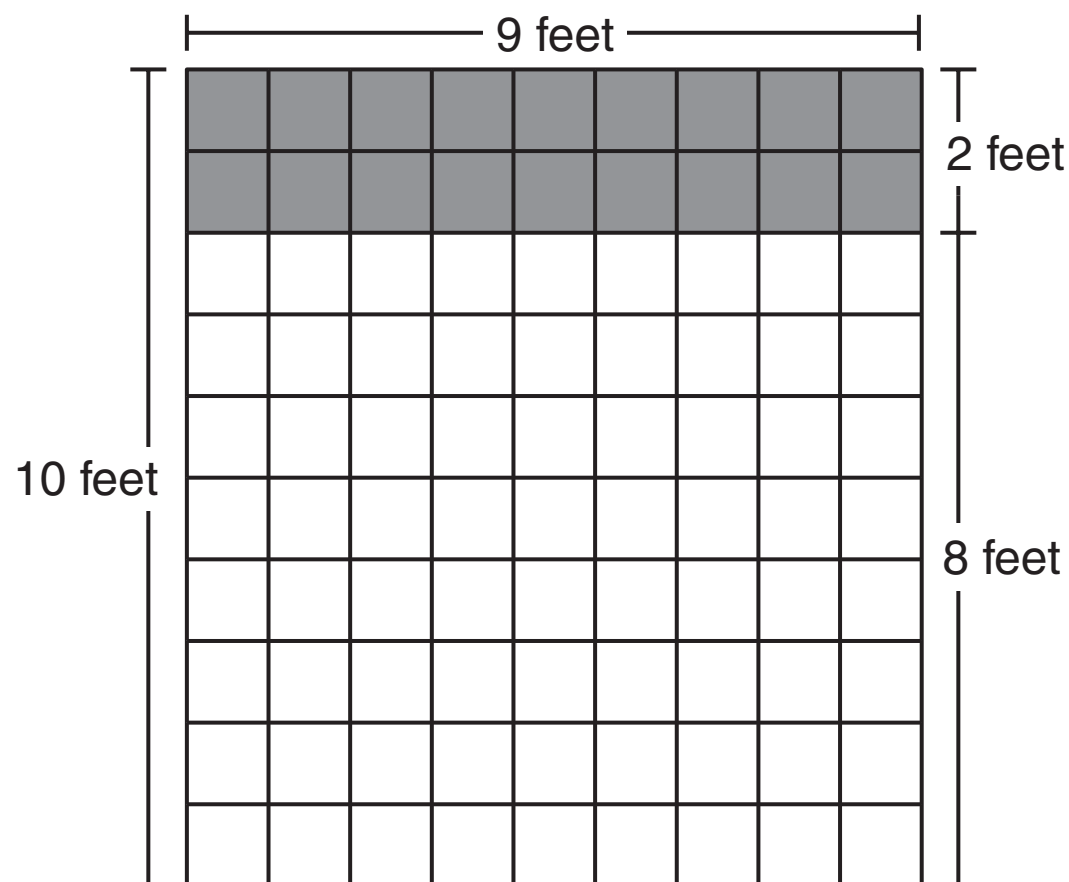
Ⓑ 2

Ⓒ 3

Ⓓ 4



22. This grid shows one of Clorinda's bedroom walls.



The top of the wall is shaded. The rest of the wall is unshaded.

Which expression can be used to find the total area of the wall?

- Ⓐ  $2 \times 8$  plus 9
- Ⓑ  $2 \times 8$  plus 10
- Ⓒ  $9 \times 2$  plus  $9 \times 8$
- Ⓓ  $10 \times 9$  plus  $2 \times 9$



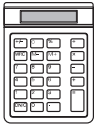


23. Rachel used eight squares of equal size to make this pattern.



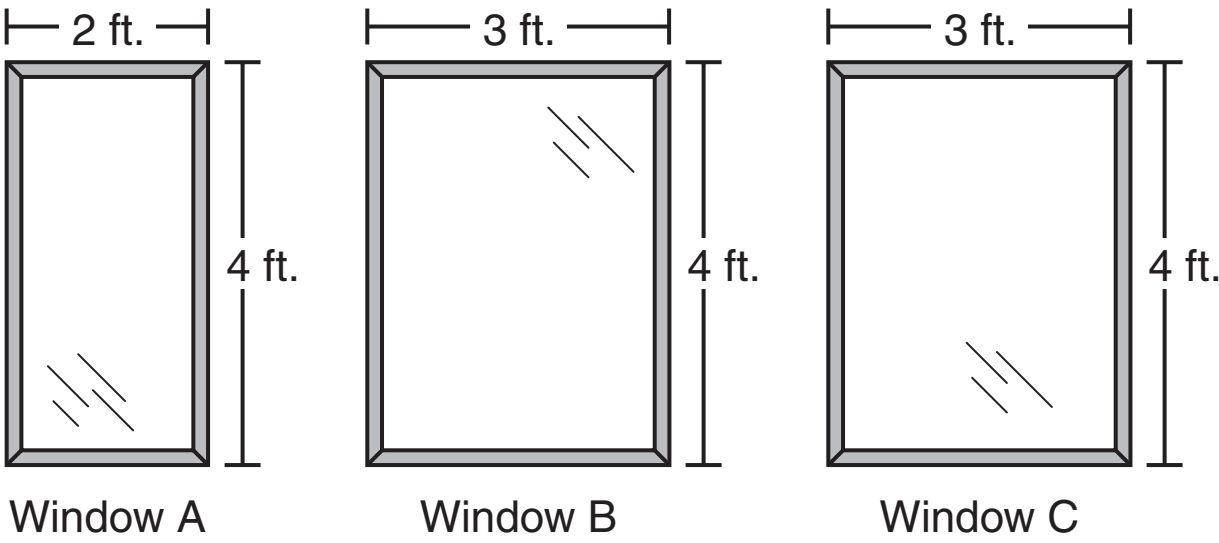
What fraction of the pattern is shaded?

- (A)  $\frac{1}{8}$
- (B)  $\frac{4}{8}$
- (C)  $\frac{4}{4}$
- (D)  $\frac{8}{4}$

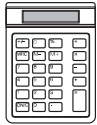


*This question has three parts. Be sure to answer all parts of the question.*

**24.** Mrs. Martinez is making curtains for three windows in her home. Each window is in the shape of a rectangle.



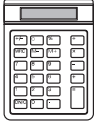
a. What is the area, in square feet, of window A? Use words or numbers to explain your answer.



b. What is the **total** area, in square feet, of windows B and C? Use words or numbers to explain your answer.

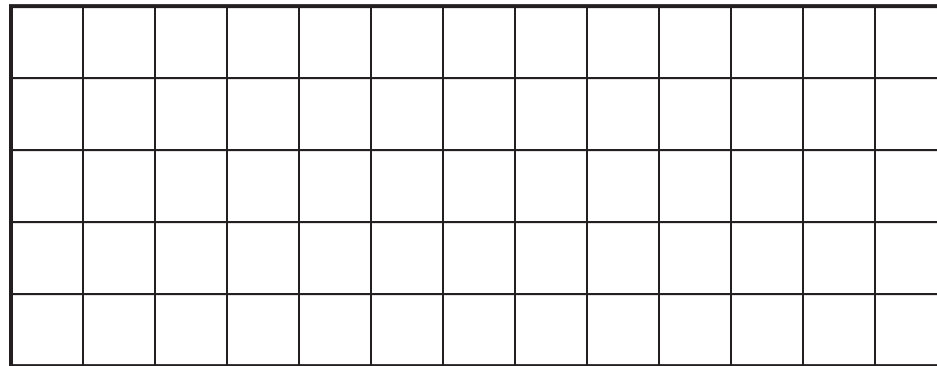
Mrs. Martinez has another rectangular window in her home that is 3 feet wider than window A. It is the same height as window A.

c. What is the **perimeter**, in feet, of this other window? Use words or numbers to explain your answer.



Use the information below to answer questions 25 and 26.

Mr. Chan made this drawing of his driveway.

**Key**

Each  stands for 1 square yard

**25.** Which equation can be used to find the area of Mr. Chan's driveway?

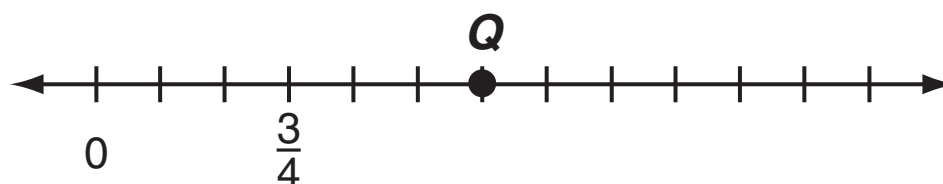
- Ⓐ  $(5 + 10) \times (5 + 3) = \square$
- Ⓑ  $(5 \times 10) + (5 \times 3) = \square$
- Ⓒ  $(3 + 10) \times (5 + 3) = \square$
- Ⓓ  $(3 \times 10) + (5 \times 3) = \square$

**26.** What is the perimeter of Mr. Chan's driveway?

- Ⓐ 18 feet
- Ⓑ 18 yards
- Ⓒ 36 feet
- Ⓓ 36 yards



27. Look at point  $Q$  on this number line.

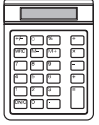


What number does point  $Q$  stand for on the number line?

- (A)  $\frac{4}{6}$
- (B) 1
- (C)  $\frac{6}{4}$
- (D) 6
28. Jamal's garden is a rectangle. The perimeter is 88 feet. The garden is 24 feet long.

What is the width of the garden?

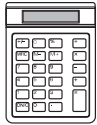
- (A) 20 feet
- (B) 32 feet
- (C) 40 feet
- (D) 64 feet



29. A tomato plant grew  $\frac{4}{6}$  inch in one week. It grew **more than**  $\frac{4}{6}$  inch the second week.

How much could the plant have grown the second week?

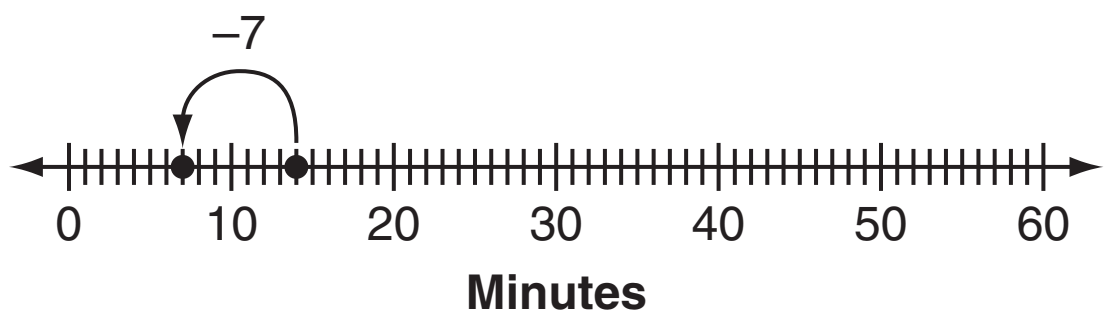
- Ⓐ  $\frac{2}{6}$  inch
- Ⓑ  $\frac{4}{8}$  inch
- Ⓒ  $\frac{3}{6}$  inch
- Ⓓ  $\frac{4}{4}$  inch



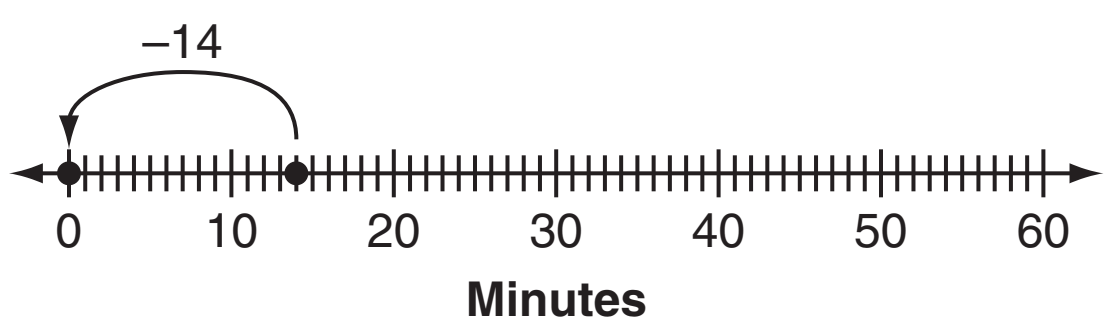
30. Bridget ran for 14 minutes. Then she walked for 7 minutes.

Which number line can be used to show how many minutes Bridget walked and ran?

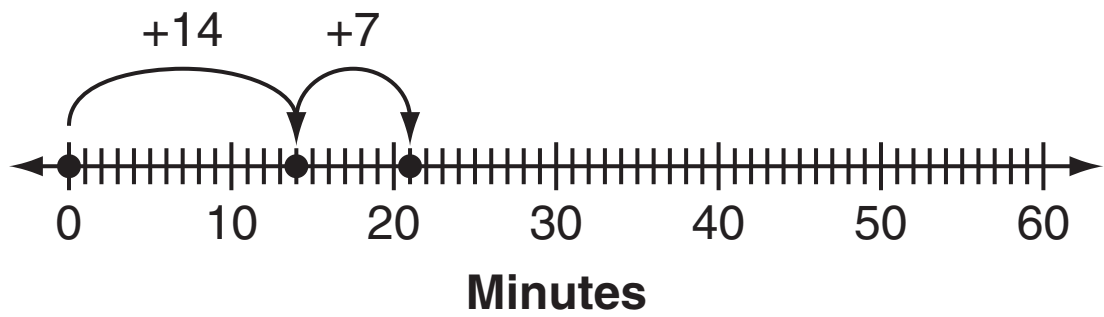
(A)



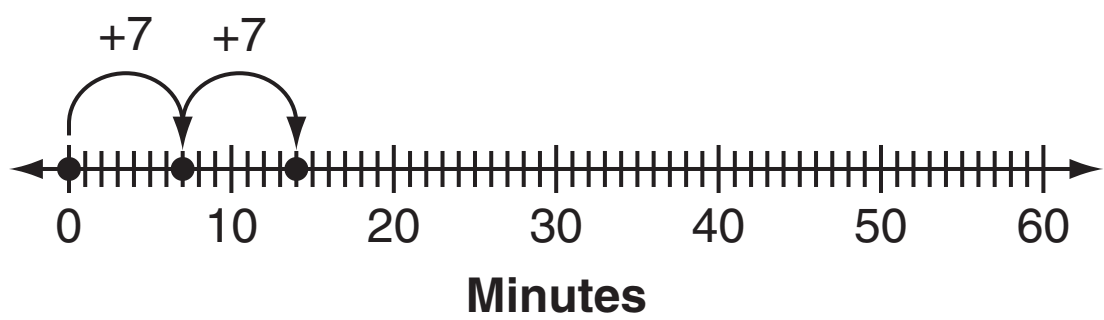
(B)

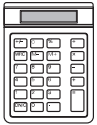


(C)



(D)



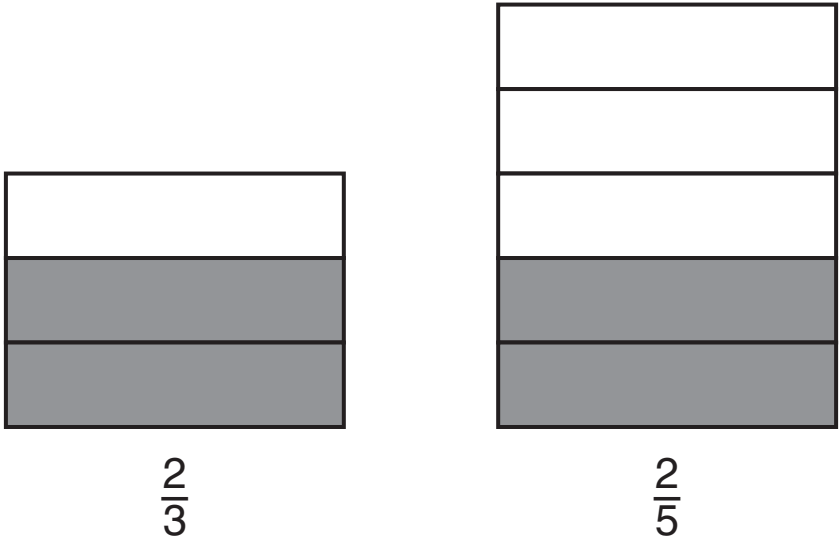


*This question has two parts. Be sure to answer all parts of the question.*

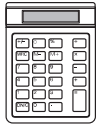
**31.** Mason wants to compare these fractions.

$\frac{2}{3}$  and  $\frac{2}{5}$

a. Explain why Mason **cannot** use these models to compare the fractions.

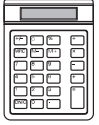






b. Compare the fractions  $\frac{2}{3}$  and  $\frac{2}{5}$ . Write a number sentence using  $<$ ,  $>$ , or  $=$ .

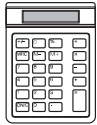
Explain how you knew which symbol to use.



- 32.** There were 1,382 tickets to the zoo sold in July. Callie will round this number to the nearest hundred.

Which of the digits in 1,382 will help Callie decide whether to round the number of tickets sold to 1,300 or 1,400?

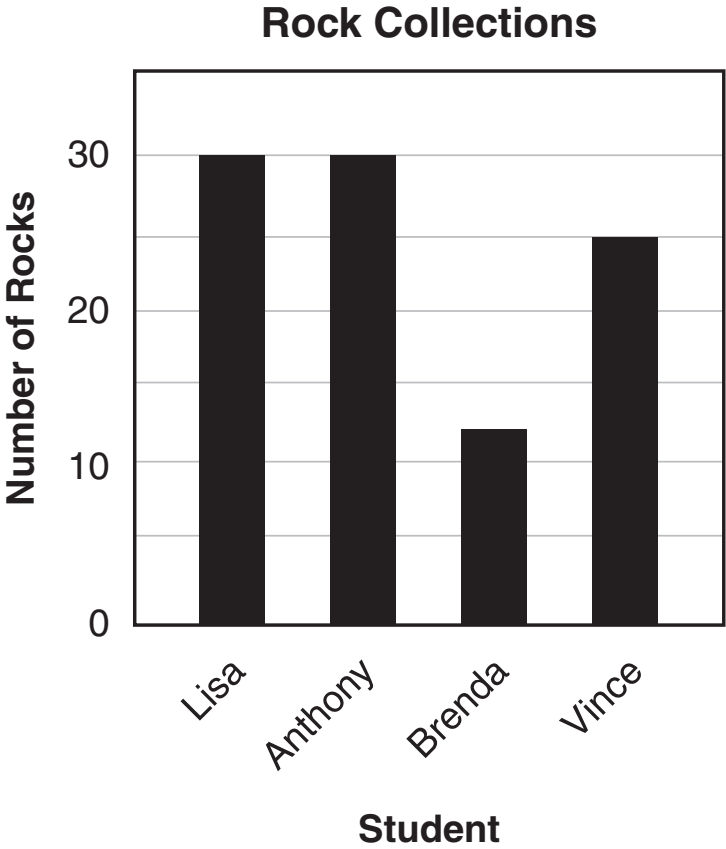
- Ⓐ 1
- Ⓑ 3
- Ⓒ 8
- Ⓓ 2



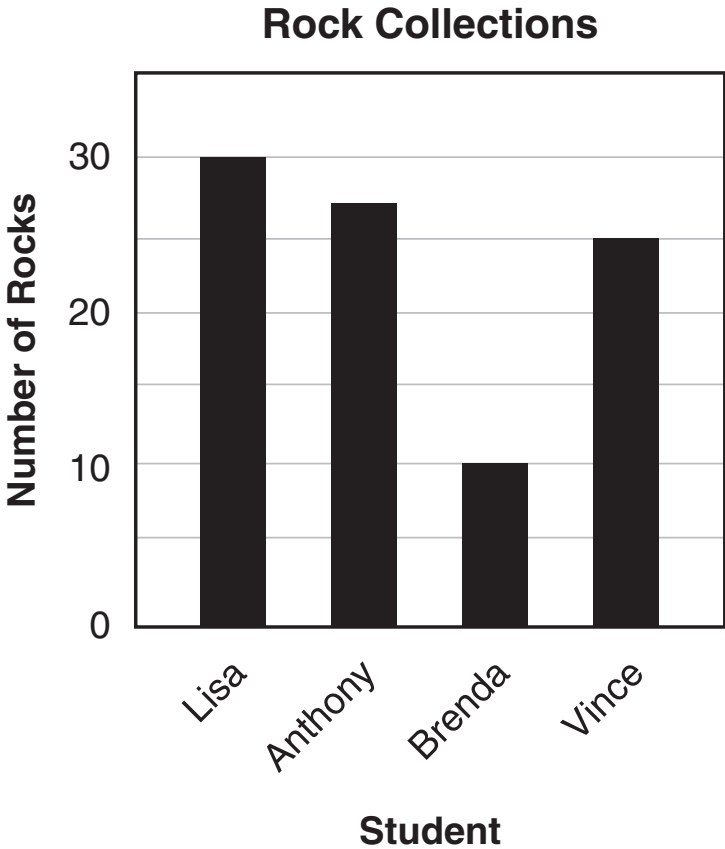
33. Lisa, Anthony, Brenda, and Vince collect rocks. This list shows the number of rocks each student has.
- Lisa has 30 rocks.
  - Anthony has 27 rocks.
  - Brenda has 12 rocks.
  - Vince has 25 rocks.

Which graph matches the list?

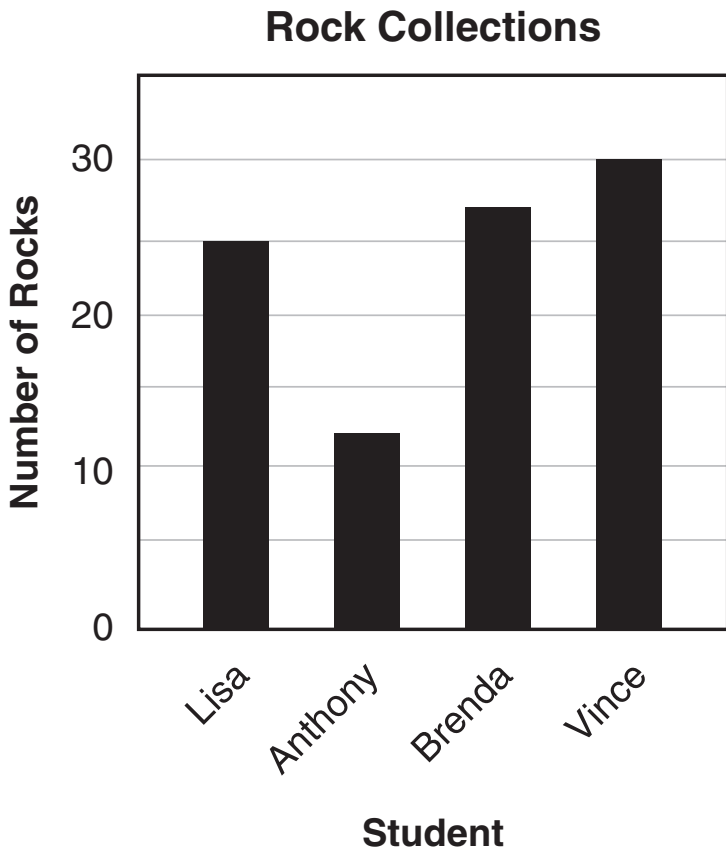
(A)



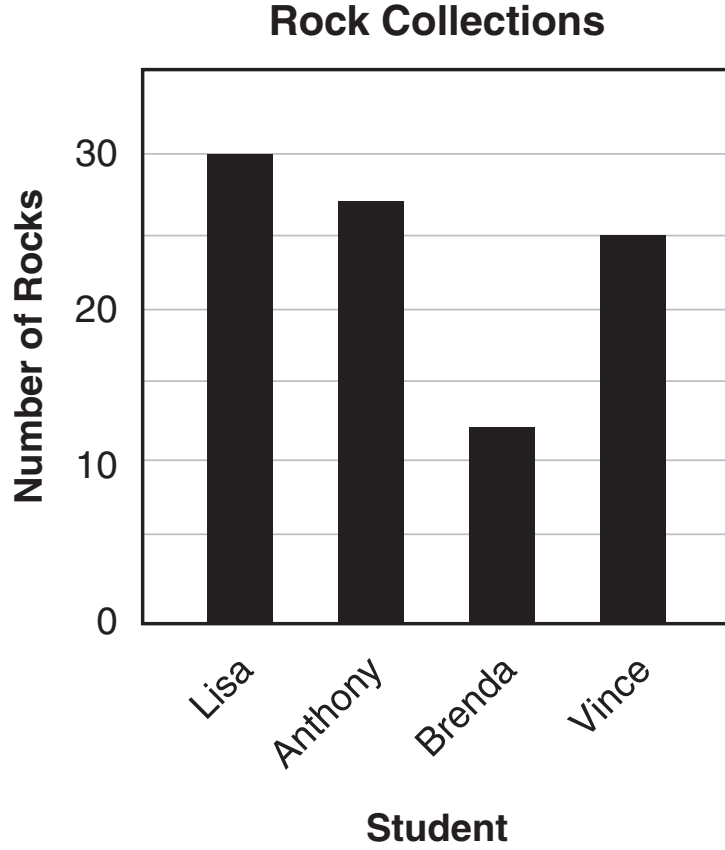
(B)

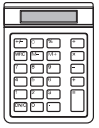


(C)

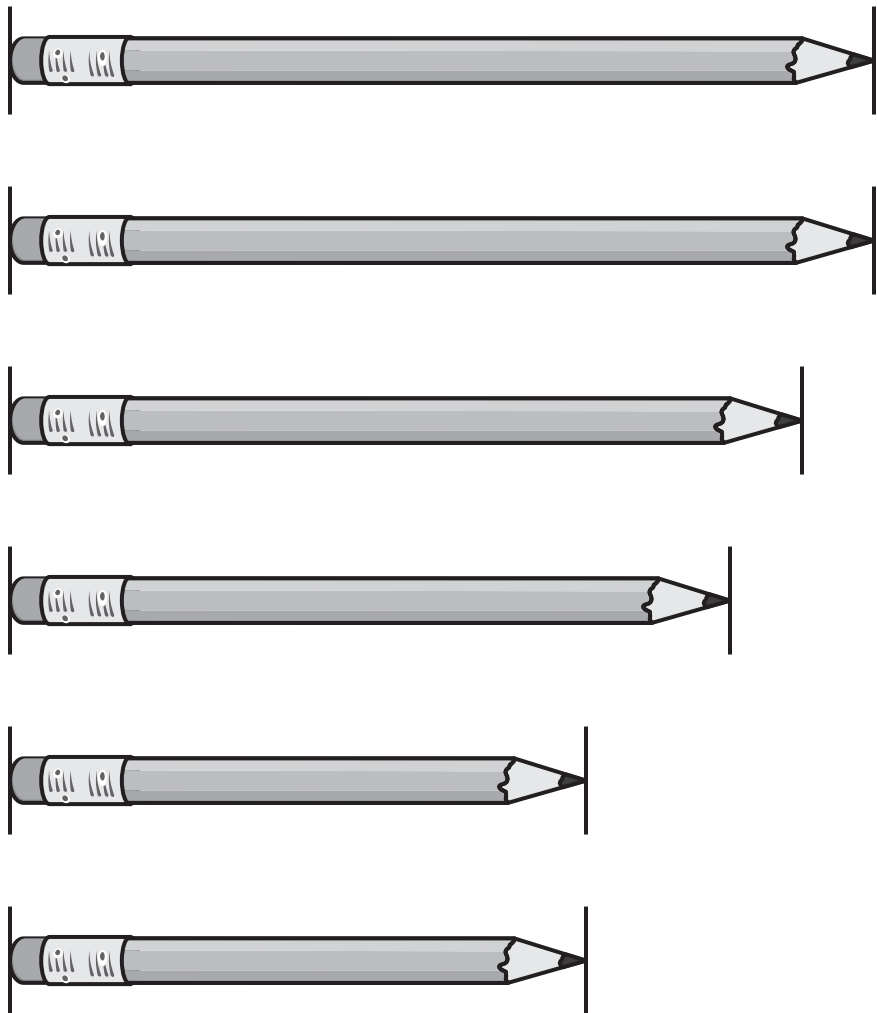


(D)

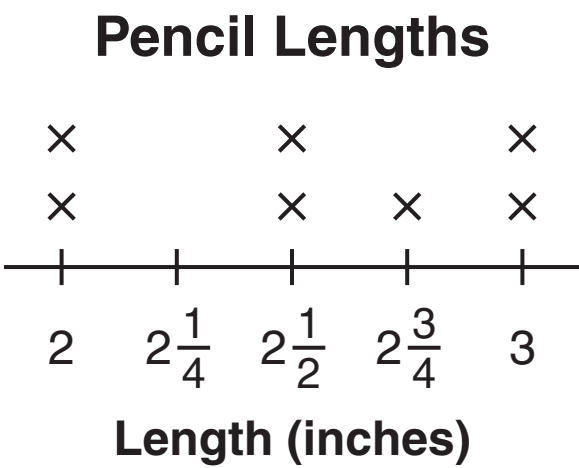




34. Seth measures the lengths, in inches, of these pencils.

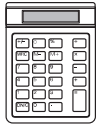


Seth made this line plot to show the lengths. He made a mistake.



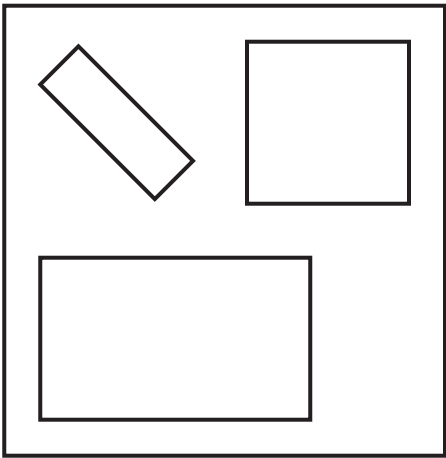
What is Seth’s mistake?

- Ⓐ He should have also shown a pencil at  $2\frac{1}{4}$  inches.
- Ⓑ He included an extra pencil shown at  $2\frac{1}{2}$  inches.
- Ⓒ One of the pencils shown at 2 inches should be shown at  $2\frac{1}{4}$  inches.
- Ⓓ One of the pencils shown at 3 inches should be shown at  $2\frac{3}{4}$  inches.

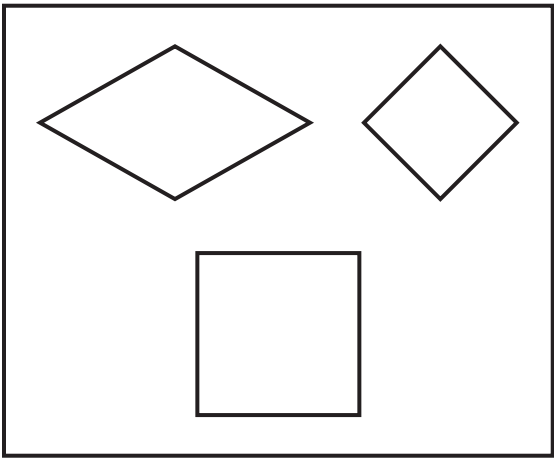


35. Lisa sorts some shapes into two groups.

Group A

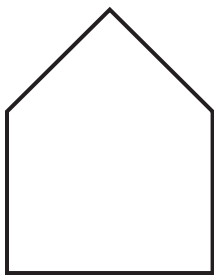


Group B

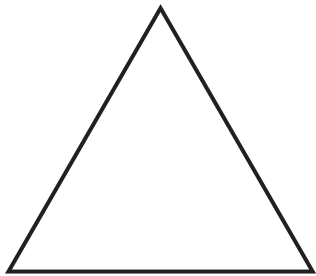


Which shape could be placed with Group B but **not** with Group A?

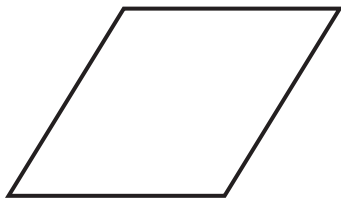
(A)



(B)

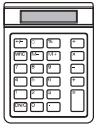


(C)



(D)



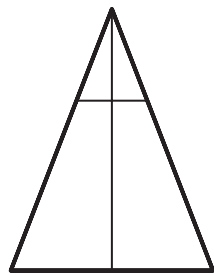


36. Abby has 24 flowers and 6 flowerpots. She wants to plant the same number of flowers in each flowerpot.

Which expression gives the number of flowers she should plant in each flowerpot?

- Ⓐ  $24 + 6$
- Ⓑ  $24 - 6$
- Ⓒ  $24 \times 6$
- Ⓓ  $24 \div 6$

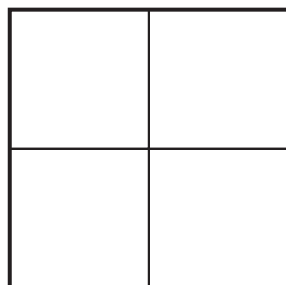
37. Ms. Clark asked her students to draw a shape so that each part of the shape is  $\frac{1}{4}$  of the area of the shape. Here are four students' shapes.



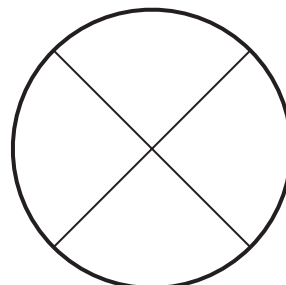
Ashlyn



Brian



Claire



Kip

Which child did **not** follow the directions?

- Ⓐ Ashlyn, because the four parts of her triangle are different sizes
- Ⓑ Brian, because he drew a rectangle with four equal parts
- Ⓒ Claire, because each part of her square is equal to one-fourth of the square
- Ⓓ Kip, because his circle is divided into fourths

THIS IS THE END OF THIS SESSION.

STOP



**DO NOT  
TURN PAGE**

**DO NOT  
WRITE  
ON THIS  
PAGE**



**SECTION 1: TESTING:** If student did not test all sessions, mark the appropriate Test Report Code indicating the student’s test completion status in Box **G**. Bubble accommodations used in Box **H** and Box **I**. Bubbling Box **J** will void the entire answer document. **Caution:** Filling in the bubble in Box **J** will result in all of the answer document not being scored.

G TEST REPORT CODES	
(Mark one bubble for each content only if applicable. You are not expected to assign one of these codes.)	
Withdrew Before Test Completion	①
Language Exempt for Reading Only	③
PED-Approved Medical Exemption	④
Parental Refusal/Non-Compliance	⑤
PED-Approved Test Invalidation	⑦
Absent During Window/Chronically Absent	⑧
Other	⑩

H IEP/504 ACCOMMODATIONS	
Human Reader English	<input type="radio"/>
Human Reader Spanish	<input type="radio"/>
Read Aloud to Self	<input type="radio"/>
Human Signer	<input type="radio"/>
Selected Response Human Scribe	<input type="radio"/>
Constructed Response Human Scribe	<input type="radio"/>
Assistive Technology Devices Presentation	<input type="radio"/>
Assistive Technology Devices Responses	<input type="radio"/>
Allow Accessibility Mode Testing	<input type="radio"/>
Large-print	<input type="radio"/>
Braille	<input type="radio"/>

I EL ACCOMMODATIONS	
Spanish Language Version	<input type="radio"/>
Picture Dictionary	<input type="radio"/>
Directions in Native Language	<input type="radio"/>
Commercial Word-to-Word Dictionary	<input type="radio"/>
Customized Dual Language Glossary	<input type="radio"/>
Pocket Word-to-Word Translator	<input type="radio"/>

J VOID-DO NOT SCORE
<input type="radio"/> Void this answer document

For Internal Use Only					
A	①	②	③	④	⑤
B	⑥	⑦	⑧	⑨	⑩
C	⑪	⑫	⑬	⑭	⑮
D	⑯	⑰	⑱	⑲	⑳
E	㉑	㉒	㉓	㉔	㉕

