



Louisiana Believes

Grade 3 Math Practice Test

For further information, contact:
Louisiana Department of Education's Help Desk
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Ask LDOE?

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iLEAP Practice Test—Grade 3 Math

Test Administrator Instructions

- ★ This document contains a Practice Test that shows what each part, or session, of an actual grade 3 transitional math assessment is like.

The Practice Test may be used at home or at school for students to become familiar with the iLEAP test they will take in spring 2013. It can help students feel more relaxed when they take the actual test.

- ★ The iLEAP Assessment Guides provide information on the overall design of the actual test, as well as sample test items and suggested informational resources. The Assessment Guides for each grade can be found on the Louisiana Department of Education's website.

http://www.doe.state.la.us/topics/assessment_guides.html

The mathematics test has three sessions to be taken separately:

- Session 1 (pages 3 to 16) includes 30 multiple-choice questions—a calculator may not be used.
 - Session 2 (pages 18 to 28) includes 20 multiple-choice questions—a calculator may be used.
 - Session 3 (pages 30 and 31) includes 2 constructed-response questions—a calculator may be used.
- ★ A Mathematics Reference Sheet, which students may use for all sessions, is located on page 34.
 - ★ Students respond to multiple-choice items using the Answer Sheets on pages 32 and 33 and constructed-response items using pages 30 and 31 of Session 3.
 - ★ The Answer Keys and Scoring Rubrics, used to score student responses, are located on pages 35 to 38.

When printing the PDF files for the three Math Sessions, be sure to set the *Page Scaling* drop-down menu on the Print screen to None, No Scaling, or Actual Size depending on the printer you are using. Otherwise measurement items may not be the correct size, which may impact student responses.



Math—Sessions 1, 2, and 3

GENERAL INSTRUCTIONS

The Math test has three sessions, two with multiple-choice questions and one with constructed-response questions. You may **not** use a calculator for session 1, but you may use a calculator for sessions 2 and 3.

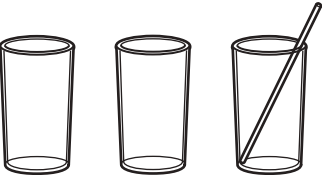
Session 1—Math (No Calculator)

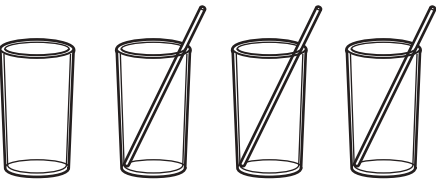
Write your answers for questions 1 through 30 in the spaces provided on page 32, session 1 answer sheet. Write only one answer for each question. You may work problems in your test booklet or on scratch paper, but you must mark your answer on your answer sheet. You may review your work in this session but do not work on any other session.

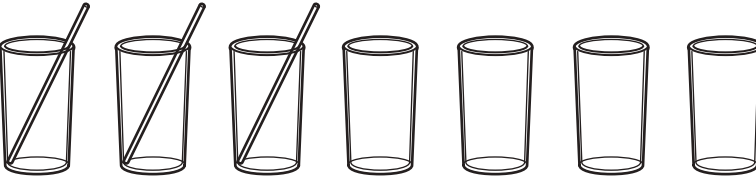



You may NOT use a calculator for this session.

1. Meg put a straw in $\frac{3}{4}$ of the glasses on a table. **Which model could show all the glasses on the table after Meg put in the straws?**

A. 

B. 

C. 

D. 

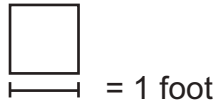
Session 1—Math (No Calculator)

2. Wendy bought 30 packs of gum. Each pack had 5 pieces. She multiplied 30×5 to find the number of pieces of gum she bought. **How many pieces of gum did Wendy buy?**
- A. 15
 - B. 35
 - C. 150
 - D. 305
3. Jimmy and Kima are going on a trip. They will drive for three days. The first day they will drive 182 miles. The second day they will drive 439 miles. The third day they will drive 217 miles. **Which expression is the closest estimate of how many miles Jimmy and Kima will drive on their trip?**
- A. $150 + 400 + 200$
 - B. $200 + 400 + 200$
 - C. $200 + 450 + 200$
 - D. $200 + 500 + 200$

Session 1—Math (No Calculator)

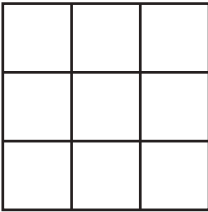
4. Kayla is lying on her towel at the beach. The towel is a rectangle that is 3 feet wide and 6 feet long. Use the key below to answer the question.

Key

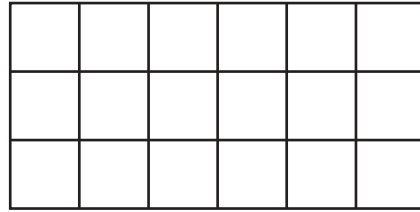


Which figure models the size of Kayla's towel?

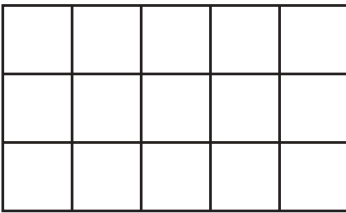
A.



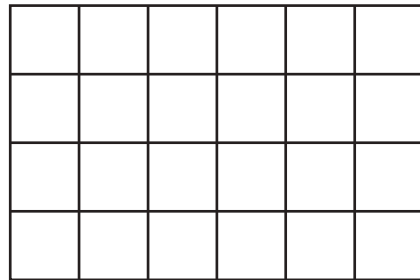
C.



B.

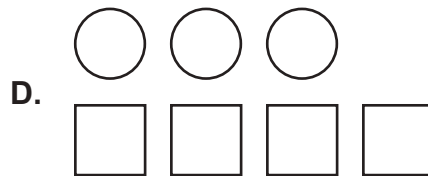
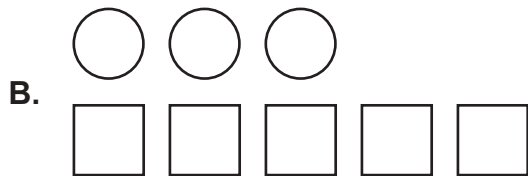
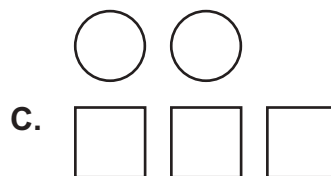
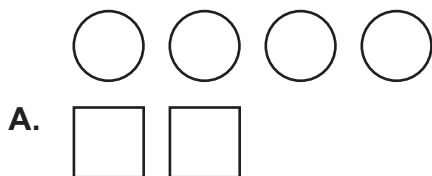


D.



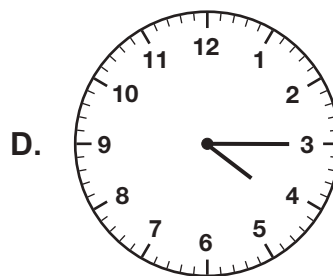
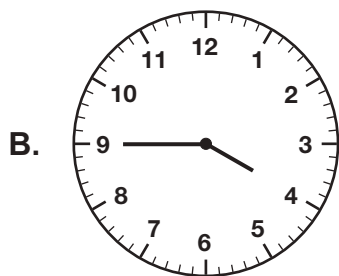
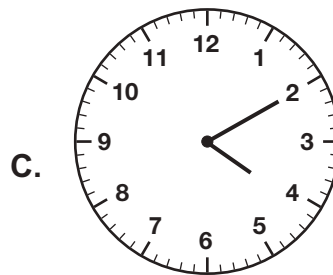
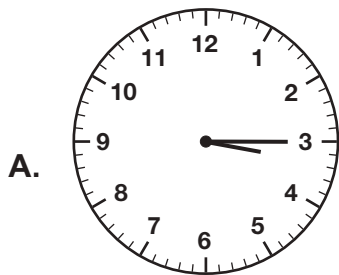
Session 1—Math (No Calculator)

5. Samantha has 342 baseball cards. Perry has 184 baseball cards. **How many more baseball cards does Samantha have than Perry?**
- A. 158
B. 168
C. 258
D. 268
6. Katie is going on vacation for 3 weeks. She finds the number of days of work she will miss by multiplying 5×3 . **Which expression shows another way Katie can find the number of days of work she will miss?**
- A. $3 + 5$
B. $3 + 3 + 3$
C. $5 + 5 + 5$
D. $5 + 5 + 5 + 5 + 5$
7. Carlos drew an odd number of circles and an even number of squares. **Which circles and squares did Carlos draw?**



Session 1—Math (No Calculator)

8. Alice has 8 buckets. Each bucket has t tennis balls in it. There are a total of 56 tennis balls in the buckets. **Which number sentence shows how to find, t , the number of tennis balls in each bucket?**
- A. $8 \div t = 56$
B. $8 \times t = 56$
C. $t + 8 = 56$
D. $t \div 8 = 56$
9. Max and Jonathon were picking strawberries. Max picked 187 strawberries. Jonathon picked 223 strawberries. Together they ate 26 of the strawberries. **Which expression shows a way to find the total number of strawberries Max and Jonathon have left?**
- A. $190 + 220 - 30 + 4$
B. $185 + 225 - 25 + 1$
C. $200 + 200 - 30 - 4$
D. $200 + 200 - 25 - 1$
10. Darla's music lesson begins at 3:30 P.M. The lesson is 45 minutes long. **Which clock shows the time her music lesson ends?**



Session 1—Math (No Calculator)

11. All of Bella's photos are in 8 photo books. Each photo book has 25 photos. **Which expression shows how to find the total number of photos Bella has?**

A. $25 \div 8$
B. $25 - 8$
C. $25 + 8$
D. 25×8

12. Gwen wrote the number pattern below on a piece of paper.

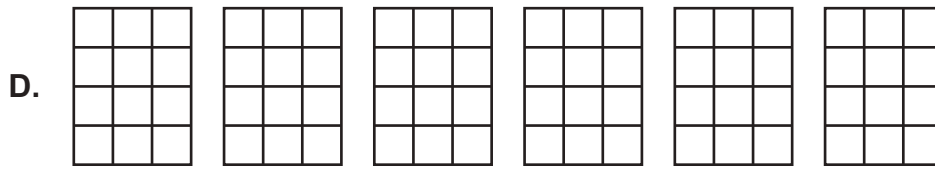
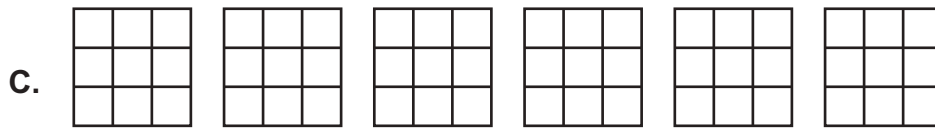
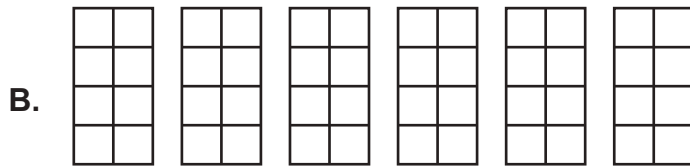
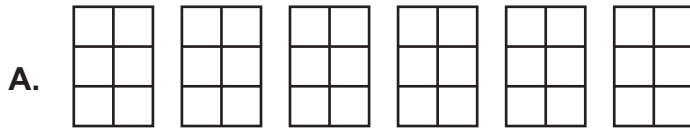
1, 5, 9, 13

What are the next two terms in Gwen's pattern?

A. 15, 17
B. 15, 19
C. 17, 19
D. 17, 21

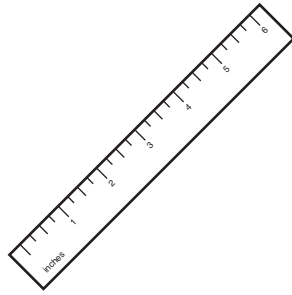
Session 1—Math (No Calculator)

13. Beatrice wants to divide 54 granola bars into 6 bags. Which picture can Beatrice use to model dividing 54 granola bars into 6 bags?



Session 1—Math (No Calculator)

14. The items shown are in Walter's desk.



ruler



pencil



scissors



glue



pencil

What fraction of the items in Walter's desk are pencils?

A. $\frac{1}{4}$

B. $\frac{2}{5}$

C. $\frac{1}{2}$

D. $\frac{2}{3}$

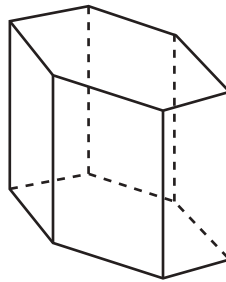
Session 1—Math (No Calculator)

15. A package of paper towels has 12 rolls of paper towels in it. Mr. Kelly wants to put an equal number of rolls of paper towels into 4 rooms. He uses the number sentence below to find the number of rolls of paper towels, t , he should put into each room.

$$12 \div t = 4$$

Which number sentence shows another way Mr. Kelly can find the number of rolls of paper towels, t , he should put into each room?

- A. $4 \div 12 = t$
 - B. $4 - t = 12$
 - C. $4 + 12 = t$
 - D. $4 \times t = 12$
16. Use the figure below to answer the question.

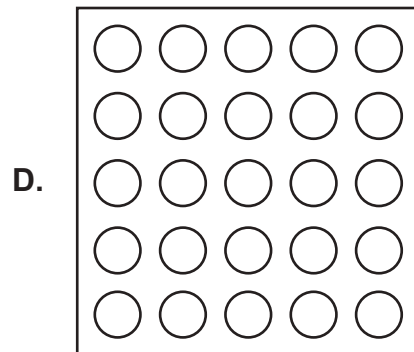
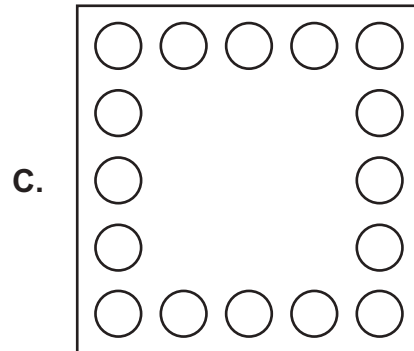
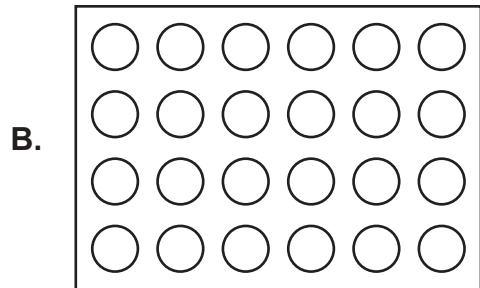
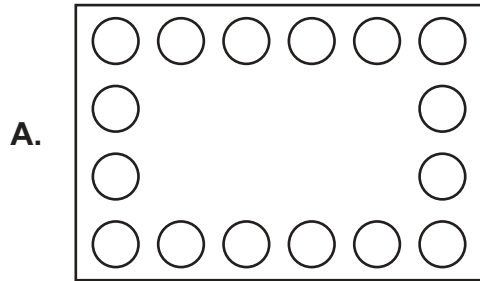


What shapes are used to create the figure shown?

- A. Two hexagons and six rectangles
 - B. Two pentagons and six rectangles
 - C. One pentagon and seven rectangles
 - D. One hexagon and seven rectangles
17. Shodi earned 389 points in the first level of her video game. She earned an additional 116 points in the bonus round. **How many points in total did Shodi earn in the first level and bonus round of her video game?**
- A. 405
 - B. 495
 - C. 505
 - D. 4,915

Session 1—Math (No Calculator)

18. Brian has some cookies. He places them on a pan to model 6×4 . Which figure could represent Brian's pan of cookies?



19. Yesterday, Micah ate an even number of strawberries. He also ate an odd number of apples. Which group could represent the strawberries, S, and apples, A, Micah ate yesterday?

A. S S S S S
A A A

B. S S S S S
A A A A

C. S S S S S S S S
A A A A

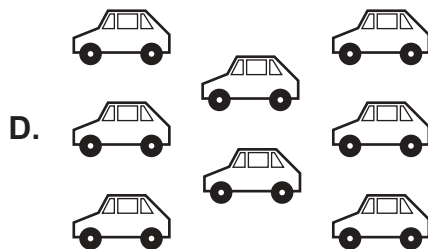
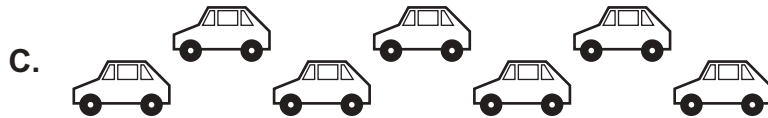
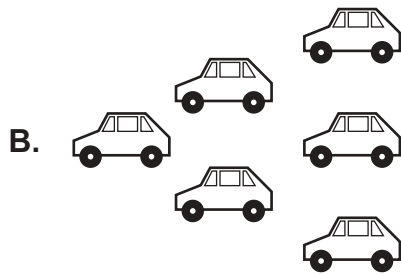
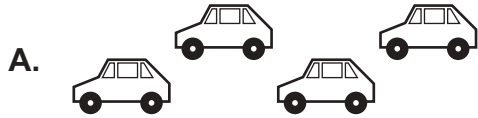
D. S S S S S S S S
A

Session 1—Math (No Calculator)

20. Ron's garden has 42 plants. Each row has 7 plants. **Which expression can be used to find the number of rows in Ron's garden?**
- A. $42 \div 7$
 - B. $42 - 7$
 - C. $42 + 7$
 - D. 42×7
21. Which measurement would best be rounded to the nearest thousand?
- A. The length of a football field in yards
 - B. The height of a professional football player in inches
 - C. The number of people at a professional football game
 - D. The weight of a professional football player in pounds
22. Kathryn baked 10 cakes. She used the same number of eggs, \square , to make each cake. **Which expression shows the total number of eggs Kathryn used to bake the cakes?**
- A. $\square \times 10$
 - B. $\square - 10$
 - C. $\square + 10$
 - D. $\square \div 10$

Session 1—Math (No Calculator)

23. Donovan has an odd number of toy cars. Which group of toy cars could belong to Donovan?



Session 1—Math (No Calculator)

24. Maria spends \$9 on lunch each day she is at work. To find how much money she spends on lunch during a 5-day work week she multiplies 5×9 . **How much money does Maria spend on lunch during a 5-day work week?**
- A. \$40
 - B. \$45
 - C. \$50
 - D. \$59
25. Malik has 240 CDs. He sorted them into 12 equal groups. **Which expression shows how to find the number of CDs in each group?**
- A. $240 \div 12$
 - B. $240 - 12$
 - C. $240 + 12$
 - D. 240×12
26. A store has 3 boxes of shirts. Each box has 4 packages with 7 shirts in each package. The expression $3 \times (4 \times 7)$ can be used to find the total number of shirts. **Which expression can also be used to find the total number of shirts?**
- A. 12×3
 - B. 12×7
 - C. 28×4
 - D. 28×7
27. Manuel bought a used car for six thousand forty-nine dollars. **What is the cost of the used car Manuel bought written as a numeral?**
- A. \$649
 - B. \$6,049
 - C. \$6,409
 - D. \$6,490

Session 1—Math (No Calculator)

28. Ms. Ling has been living in her home for exactly 4 years. She knows that there are 12 months in each year. She found the total number of months, m , she has been living in her home by using the number sentence below.

$$4 \times 12 = m$$

Which number sentence shows another way to find the total number of months, m , Ms. Ling has been living in her home?

- A. $12 \div m = 4$
 - B. $m \times 4 = 12$
 - C. $12 - m = 4$
 - D. $m \div 4 = 12$
29. Connor is measuring the capacity of a jar. **Which unit of measure can he use?**
- A. Centimeter
 - B. Cup
 - C. Gram
 - D. Pound
30. Ms. Fisher used the expression $(6 \times 8) \times 12$ to find the total number of markers needed for her students' art project. **Which expression is equal to the one used by Ms. Fisher?**
- A. $6 + (8 + 12)$
 - B. $6 + (8 \times 12)$
 - C. $6 \times (8 + 12)$
 - D. $6 \times (8 \times 12)$



Math—Sessions 1, 2, and 3

GENERAL INSTRUCTIONS

The Math test has three sessions, two with multiple-choice questions and one with constructed-response questions. You may **not** use a calculator for session 1, but you may use a calculator for sessions 2 and 3.

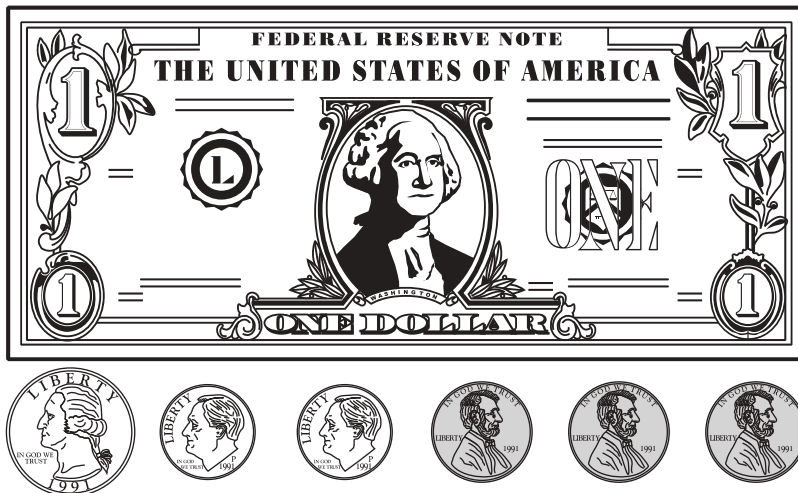
Session 2—Math (Calculator)

Write your answers for questions 31 through 50 in the spaces provided on page 33, session 2 answer sheet. Write only one answer for each question. You may work problems in your test booklet or on scratch paper, but you must mark your answer on your answer sheet. You may review your work in this session but do not work on any other session.



You MAY use a calculator for this session.

31. Andy paid for his breakfast with a \$5 bill. He received the change shown below.



How much did Andy's breakfast cost?

- A. \$1.48
- B. \$3.52
- C. \$3.62
- D. \$4.48

Session 2—Math (Calculator)

32. A number pattern is shown below.

1, 3, 9, 27

Which rule can be used to find the next number in the pattern?

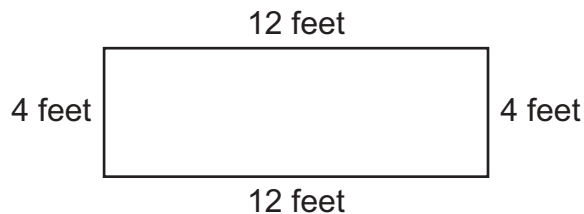
- A. Add 2 to the last number
 - B. Add 6 to the last number
 - C. Multiply the last number by 3
 - D. Multiply the last number by 9
33. Mateo is making a picture frame. He needs a stick that is $4\frac{1}{2}$ inches long. Use your ruler to measure the lengths of the sticks below. Which stick can Mateo use?



Session 2—Math (Calculator)

34. Michelle has 3 packages of crayons. Each package has \square crayons. She has a total of 42 crayons. **Which number sentence can be used to find the number of crayons in each of Michelle's packages?**
- A. $3 \times \square = 42$
B. $3 \div \square = 42$
C. $42 - \square = 3$
D. $42 \times \square = 3$
35. John has 4 cookies. Sara has 2 more cookies than John. Darius has 3 times as many cookies as Sara. **How many cookies does Darius have?**
- A. 9
B. 14
C. 18
D. 24

36. Mr. Bennet drew the plan of his new garden as shown below.



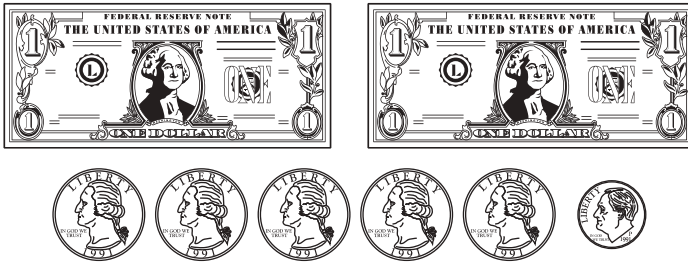
How many feet of fencing will Mr. Bennet need to go around his garden?

- A. 16 feet
B. 24 feet
C. 32 feet
D. 48 feet

Session 2—Math (Calculator)

37. Lindsay bought a book from Rick for \$3.35. She paid Rick the exact amount for the book. Which group of money could Lindsay have given to Rick?

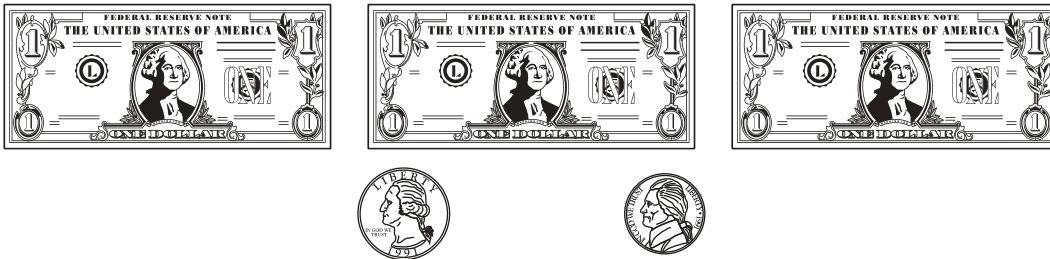
A.



B.



C.



D.



Session 2—Math (Calculator)

38. Last year Carl baked a total of 18 pies. He baked 6 pies for his family and p pies for each of the 4 school fund-raisers. **Which number sentence can be used to find the number of pies, p , Carl baked for each of the school fund-raisers?**

- A. $6 \times p - 18 = 4$
- B. $18 - 6 \times p = 4$
- C. $4 + 6 \times p = 18$
- D. $6 + 4 \times p = 18$

39. The table below shows the Jaguars' total points for each of four basketball seasons.

Jaguars' Total Points per Season

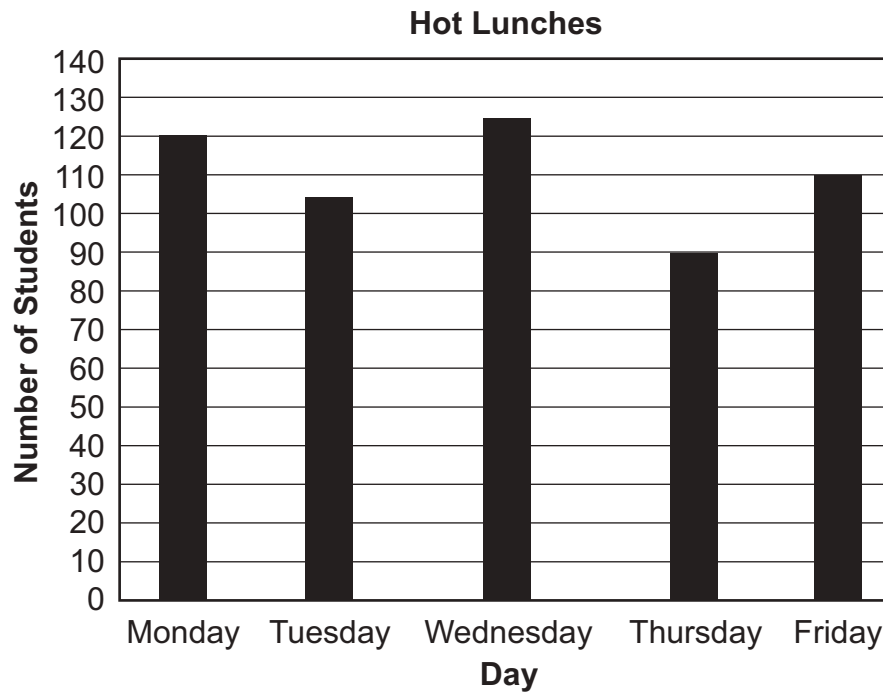
Season	Total Points
1	875
2	570
3	785
4	507

Which number sentence correctly compares the Jaguars' total points for two seasons?

- A. $507 = 570$
- B. $570 < 507$
- C. $785 > 875$
- D. $875 > 785$

Session 2—Math (Calculator)

40. The bar graph below shows the number of students who bought a hot lunch from the school cafeteria each day last week.

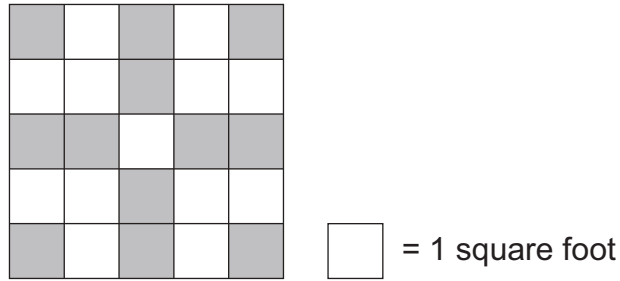


How many more students bought a hot lunch on Monday than on Thursday?

- A. 15
- B. 30
- C. 35
- D. 50

Session 2—Math (Calculator)

41. Kelly made a quilt using square patches. Her quilt is shown below.



What is the area of her quilt?

- A. 20 square feet
 - B. 24 square feet
 - C. 25 square feet
 - D. 26 square feet
42. Stephanie flew 2,448 miles from Los Angeles to New York City. **What is the number of miles Stephanie flew rounded to the nearest thousand?**
- A. 2,000
 - B. 2,400
 - C. 2,500
 - D. 3,000
43. Theresa had a bag of 72 marbles. She put the marbles into 9 equal groups. **Which number sentence shows how to find the number of marbles Theresa put into each group?**
- A. $72 \div 9 = 8$
 - B. $72 - 9 = 63$
 - C. $9 + 72 = 81$
 - D. $9 \div 72 = 0.125$

Session 2—Math (Calculator)

44. Brooke's baby, Ryan, weighed 7 pounds when he was born. Brooke weighed her baby each month after he was born. Ryan's weight each month, in pounds, is shown in the table below.

Ryan's Weight

Age	Weight (pounds)
birth	7
1 month	9
2 months	11
3 months	13
4 months	15

Which statement about the weight of the baby is true?

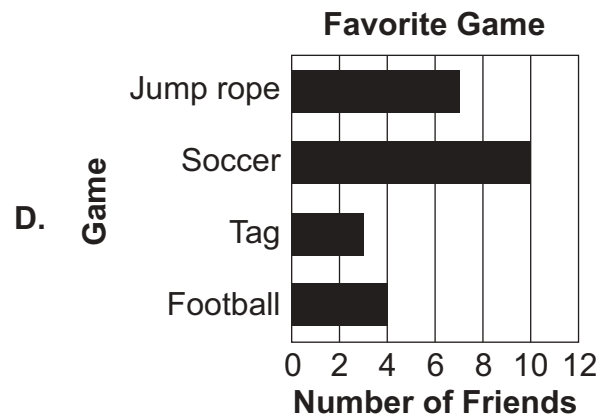
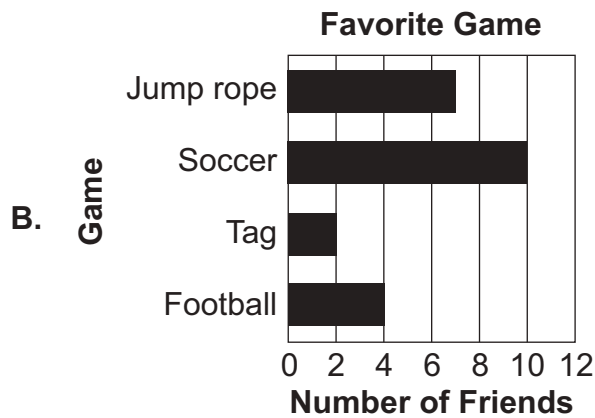
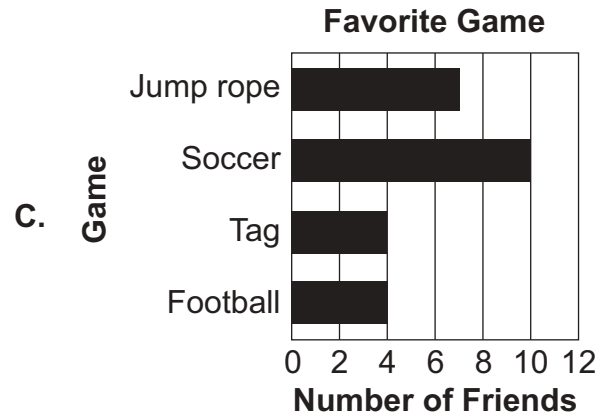
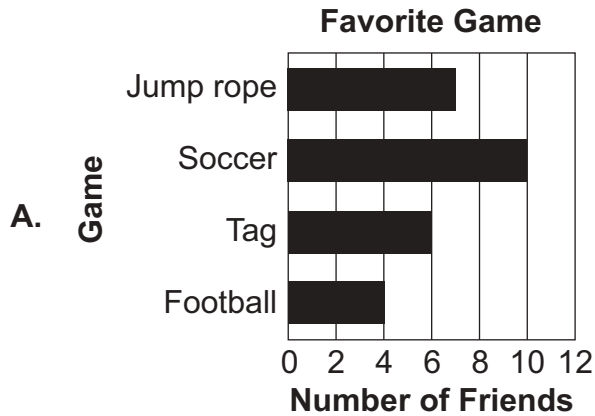
- A. The baby gained 1 pound each month.
 - B. The baby gained 2 pounds each month.
 - C. The baby gained 9 pounds in the first month.
 - D. The baby gained 15 pounds in the last month.
45. Ty has 12 weeks to read a certain number of books. He will spend 2 weeks reading each book. **Which expression can Ty use to find the total number of books he will read?**
- A. $12 - 2$
 - B. $12 + 12$
 - C. $12 - 2 - 2 - 2$
 - D. $12 - 2 - 2 - 2 - 2 - 2 - 2$

Session 2—Math (Calculator)

46. LaShana asked her friends about their favorite game. She made the tally chart shown below.

Favorite Game	
Jump rope	
Soccer	
Tag	
Football	

Which graph shows her data correctly?

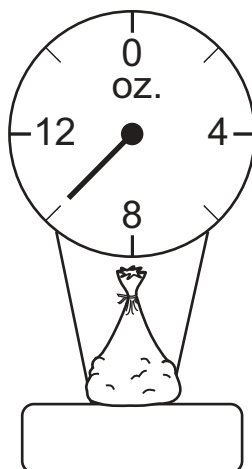


Session 2—Math (Calculator)

47. Lucy is making gift baskets. She puts 3 apples in each gift basket. **Which number sentence shows how to find the total number of gift baskets, b , Lucy can make with 24 apples?**

- A. $24 + 3 = b$
- B. $3 + b = 24$
- C. $24 \div b = 3$
- D. $3 \times 24 = b$

48. Bob is buying gummy bears at the grocery store. He places his bag of gummy bears on the scale shown below.



What is the weight, in ounces, of Bob's gummy bears?

- A. 9 ounces
- B. 10 ounces
- C. 11 ounces
- D. 12 ounces

Session 2—Math (Calculator)

49. Noah collected 36 coins. He put the same number of coins into each display sheet. The display sheets model $36 \div 4$. Which group of display sheets shows how Noah laid out his coins?



50. Peter is in a group of 25 people. All 25 people went fishing in boats. There were 5 people in each boat. How can Peter find the number of boats the group used?
- A. Add 5 to 25
 - B. Divide 25 by 5
 - C. Multiply 25 by 5
 - D. Subtract 5 from 25



Math—Sessions 1, 2, and 3

GENERAL INSTRUCTIONS

The Math test has three sessions, two with multiple-choice questions and one with constructed-response questions. You may **not** use a calculator for session 1, but you may use a calculator for sessions 2 and 3.

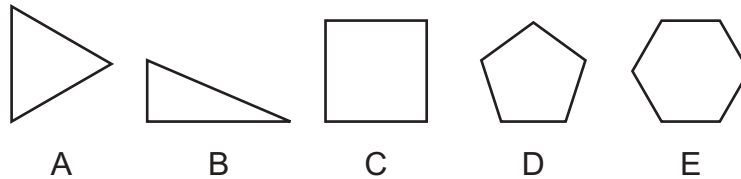
Session 3—Math (Calculator)

Write your answers for questions 51 to 52 in the spaces provided below. The questions have more than one part. Show all the work you do to find your answers. Even if you cannot answer all parts, answer as many as you can. You may still get points for answering part of a question. Be sure to write clearly. You may review your work in this session but do not work on any other session.



You MAY use a calculator for this session.

51. Paul drew the 5 shapes shown below.



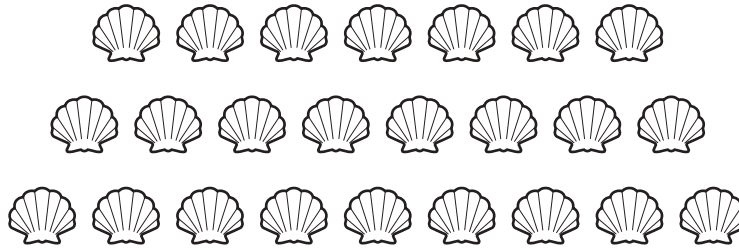
Paul put the shapes in two different groups based on a common feature. In Group 1 he put shapes A, C, D, and E. In Group 2 he put shape B.

A. What feature do all the shapes in Group 1 have in common that shape B does not have?

B. Draw a shape with the same number of sides as shape C that would belong in Group 2 with shape B.

Session 3—Math (Calculator)

52. Ben went to the beach yesterday. He found the seashells shown below.



Ben gave them all away.

- A. Ben gave seashells to 6 people. He gave the same number of seashells to each person. The first person he gave seashells to was Chad. Circle each of the seashells Ben gave to Chad.
- B. Ben goes to the beach again today. He finds the same number of seashells today as he did yesterday. Ben gives all the seashells away to more than 6 people. Each person gets the same number of seashells. To how many people can Ben give the seashells? Show or explain how you found your answer.



Multiple-Choice Answer Sheet

Name: _____



Session 1

1. _____

16. _____

2. _____

17. _____

3. _____

18. _____

4. _____

19. _____

5. _____

20. _____

6. _____

21. _____

7. _____

22. _____

8. _____

23. _____

9. _____

24. _____

10. _____

25. _____

11. _____

26. _____

12. _____

27. _____

13. _____

28. _____

14. _____

29. _____

15. _____

30. _____

Multiple-Choice Answer Sheet

Name: _____



Session 2

31. _____

41. _____

32. _____

42. _____

33. _____

43. _____

34. _____

44. _____

35. _____

45. _____

36. _____

46. _____

37. _____

47. _____

38. _____

48. _____

39. _____

49. _____

40. _____

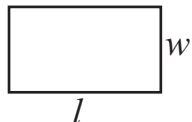
50. _____



MATHEMATICS REFERENCE SHEET—GRADE 3

Use the information below to answer questions on the Math test.

Rectangle



$$\text{Area} = l \times w$$

$$\text{Perimeter} = l + l + w + w$$

Multiple-Choice Answer Key

Name: _____



Session 1

- | | |
|--------------|--------------|
| 1. <u>B</u> | 16. <u>A</u> |
| 2. <u>C</u> | 17. <u>C</u> |
| 3. <u>C</u> | 18. <u>B</u> |
| 4. <u>C</u> | 19. <u>D</u> |
| 5. <u>A</u> | 20. <u>A</u> |
| 6. <u>C</u> | 21. <u>C</u> |
| 7. <u>D</u> | 22. <u>A</u> |
| 8. <u>B</u> | 23. <u>C</u> |
| 9. <u>A</u> | 24. <u>B</u> |
| 10. <u>D</u> | 25. <u>A</u> |
| 11. <u>D</u> | 26. <u>B</u> |
| 12. <u>D</u> | 27. <u>B</u> |
| 13. <u>C</u> | 28. <u>D</u> |
| 14. <u>B</u> | 29. <u>B</u> |
| 15. <u>D</u> | 30. <u>D</u> |

Multiple-Choice Answer Key

Name: _____



Session 2

31. B

41. C

32. C

42. A

33. C

43. A

34. A

44. B

35. C

45. D

36. C

46. D

37. A

47. C

38. D

48. B

39. D

49. B

40. B


50. B

Constructed-Response Scoring Rubrics



Session 3

51.

Scoring Rubric	
2	The student earns 2 points.
1	The student earns 1 point.
0	The student's response is incorrect, irrelevant to the skill or concept being measured, or blank.
Sample Answer:	
<p>A. The sides of each shape are the same length.</p> <p>B. </p>	
Points Assigned:	
<p>Part A: 1 point</p> <p>1 point for coming up with a classification that correctly describes a shared attribute of shapes A, C, D, and E that is not present in shape B (e.g., side lengths are the same, angle measures are the same, etc.)</p> <p>Part B: 1 point</p> <p>1 point for drawing any quadrilateral that does not fit the rule stated in part A (e.g., a trapezoid or a rectangle that is not a square [if side length congruence is the rule] or a rhombus that is not a square [if angle congruence is the rule])</p>	

Note: Scorers should follow along with the student's work throughout. If student makes an error in a previous part and subsequent answers are correct based on the earlier error, student should not be penalized again.

52.

Scoring Rubric	
2	The student earns 2 points.
1	The student earns 1 point.
0	The student's response is incorrect, irrelevant to the skill or concept being measured, or blank.
Sample Answer:	
<p>A. The student should circle 4 seashells in the picture.</p> <p>B. Ben found 24 seashells and $8 \times 3 = 24$. Since 8 is greater than 6, he can share with 8 people.</p>	
Points Assigned:	
<p>2 points for circling 4 seashells and for coming up with 8, 12, or 24 with a written explanation or for showing work.</p> <p>1 point for only circling 4 seashells in part A.</p> <p>OR</p> <p>Coming up with 8, 12, or 24 in part B.</p> <p>OR</p> <p>Showing understanding of the factors of 24, but does not meet the criteria of choosing one that is greater than six.</p>	