Numeration, Patterns, and Relationships

Read each question. Then mark your answer on the sheet.

1. What is the value of the 5 in the number 152,309?

A 50,000

B 5,000

C 500

D 50

2. What is the standard form of $80,000 + 5,000 + 600 + 20$?

A 86,502

B 85,620

C 80,562

D 8,562

3. What is the word name for 129,305?

A One hundred twenty-nine thousand, thirty-five

B One hundred twenty-nine thousand, three hundred five

C Twelve thousand, nine hundred thirty-five

D Twelve thousand, nine hundred thirty

4. In the number 9,984, which places contain digits where one digit is ten times as great as the other?

A the thousands and tens places

B the tens and ones places

C the hundreds and tens places

D the thousands and hundreds places

5. What is 87,852 rounded to the nearest thousand?

A 87,000

B 87,850

C 88,000

D 88,852

6. Which of these comparisons are correct?

Choose all that apply.

A $75,888 < 79,065$

B $66,773 < 62,753$

C $89,765 > 78,932$

D $60,056 = 60,056$

Numeration, Patterns, and Relationships
(continued)

Read each question. Then mark your answer on the sheet.

7. Michaela writes a number pattern. The rule is: subtract 15.

Which could be Michaela's pattern?

Choose all that apply.

A 150, 135, 120, 105

B 175, 160, 145, 130

C 100, 115, 130, 145

D 155, 130, 115, 110

8. Danny finds that the rule for this pattern is: add 6.

Which is also true about this pattern?

35, 41, 47, 53, 59

A The ones digit is always greater than the tens digit.

B The tens digit is always greater than the ones digit.

C The numbers are all even.

D The numbers are all odd.

9. Shawn and Bilal want to collect 99 tokens. Shawn has collected 34 tokens. Bilal has collected 47 tokens. Which shows how many more tokens, t, Shawn and Bilal need to collect to reach 99 tokens?

99 tokens		
34	47	t

A $t = 18$ **C** $t = 52$

B $t = 28$ **D** $t = 81$

10. Tickets for the baseball game are $9 for adults and $5 for children. Which shows the total cost, c, for 1 adult and 3 children to go to the game?

A $c = \$14$ **C** $c = \$27$

B $c = \$24$ **D** $c = \$29$

11. Jane has 30 beads. Chris has 34 beads. Jane and Chris share their beads among 8 friends. Each friend gets b beads. Which shows a correct way to find b?

A $30 + 34 = 64; 64 + 8 = b$

B $34 + 30 = 64; 64 \div 8 = b$

C $30 + 34 = 64; 64 \div 9 = b$

D $34 - 8 = 26; 26 - 8 = b$

Name _____

Operations with Whole Numbers

Read each question. Then mark your answer on the sheet.

12. Which shows the difference?
Regroup if you need to.

$$\begin{array}{r} 70,900 \\ -\ 15,756 \\ \hline \end{array}$$

  A 65,254
  B 55,254
  C 55,154
  D 55,144

13. Which shows the sum?
Regroup if you need to.

$$\begin{array}{r} 47,286 \\ +\ 15,472 \\ \hline \end{array}$$

  A 52,928
  B 53,028
  C 62,028
  D 62,758

14. If you knew $4 \times 5 = 20$, which number sentence could you use to find the answer to 5×5?

  A $20 + 4 = 24$
  B $25 + 5 = 30$
  C $20 + 6 = 26$
  D $20 + 5 = 25$

15. Which multiplication fact can help you solve $24 \div 6$?

  A $3 \times 6 = 18$
  B $4 \times 6 = 24$
  C $3 \times 8 = 24$
  D $1 \times 6 = 6$

16. Find $12 \div 5$. Use the picture to help.

○ ○ ○ ○
○ ○ ○ ○
○ ○ ○ ○
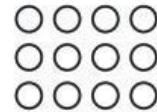
  A 5 R1
  B 3 R1
  C 2 R2
  D 2 R1

17. Dana wrote an equation to correctly show that 42 is 6 times as many as 7. Which shows the equation Dana wrote?

  A $42 = 29 + 6 + 7$
  B $42 = 6 \times 7$
  C $42 = 14 + 14 + 14$
  D $40 + 2 = 42$

LIVEWORKSHEETS

Operations with Whole Numbers
(continued)

Read each question. Then mark your answer on the sheet.

18. Which makes the number sentences true?

$56 = ? \times 8$

$8 \times ? = 56$

A 7

B 6

C 5

D 4

19. The length of a rectangle is 3 times as long as its width. The width of the rectangle is 9 inches. What is the rectangle's length?
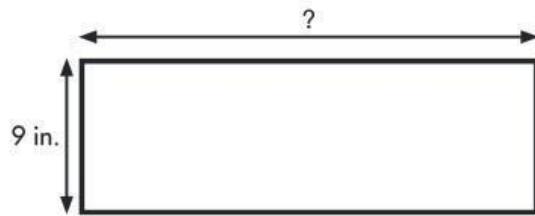
A 9 inches

B 12 inches

C 27 inches

D 30 inches

20. Marty's ribbon is 4 feet long. Josh's ribbon is 3 times as long as Marty's ribbon. Which shows a way to find the length of Josh's ribbon, *s*?

A $1 \times 3 = s$

B $3 + s = 4$

C $s = 3 \times 3$

D $3 \times 4 = s$

21. Mrs. Parker bought 4 bags of crayons for her class. Each bag contains 124 crayons. How many crayons did Mrs. Parker buy in all?

A 496 crayons

B 476 crayons

C 396 crayons

D 376 crayons

22. The fan factory ordered 948 fan blades. If 4 blades are needed for each fan, how many fans can be made?

A 238 fans

B 237 fans

C 227 fans

D 212 fans

23. 1,518 hot dogs were sold at the football game. If each hot dog cost $4, what was the total amount of money spent on hot dogs?

A $7,121

B $7,057

C $6,152

D $6,072

Name _____

Operations with Whole Numbers
(continued)

Read each question. Then mark your answer on the sheet.

24. Dan drives the same number of miles each day for 3 days. After 3 days, he has driven 1,641 miles. How many miles did Dan drive each day?

A 447 miles

B 547 miles

C 463 miles

D 563 miles

25. Ian says 9 is a prime number.

Li says 9 is a composite number.

Which shows who is correct and why?

A Ian is correct because $1 \times 9 = 9$ and $9 \times 1 = 9$.

B Li is correct because $3 + 3 + 3 = 9$.

C Ian is correct because 9 can be divided evenly by 1 and itself.

D Li is correct because 9 can be divided evenly by numbers other than 1 and itself.

26. Which list shows all of the factors of 45?

A 1, 5, 9, 45

B 1, 3, 6, 9, 12, 45

C 1, 3, 5, 9, 15, 45

D 1, 5, 7, 9, 45

27. Which of the following completes the sentence? Choose all that apply.

63 is a multiple of ___.

A 9

B 8

C 7

D 3

28. Which shows the product of 18×13?

You can use the array to help.
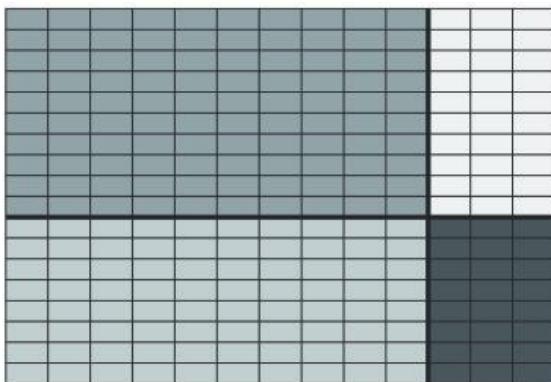
A 214

B 216

C 224

D 234

Fractions and Decimals

Read each question. Then mark your answer on the sheet.

29. Which of the following is NOT equivalent to $\frac{4}{8}$?

$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$

A $\frac{1}{2}$

B $\frac{3}{6}$

C $\frac{4}{10}$

D $\frac{6}{12}$

30. Which of the following statements are true? Choose all that apply.

1			
$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$
$\frac{1}{8}$ $\frac{1}{8}$	$\frac{1}{8}$ $\frac{1}{8}$	$\frac{1}{8}$ $\frac{1}{8}$	$\frac{1}{8}$ $\frac{1}{8}$
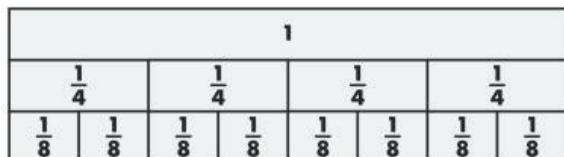
A $\frac{3}{4} > \frac{6}{8}$

B $\frac{1}{4} = \frac{2}{8}$

**C** $\frac{3}{4} < \frac{7}{8}$

D $\frac{4}{4} < \frac{6}{8}$

31. Which decimal is equal to $\frac{9}{100}$?

A 0.09

B 0.90

C 0.9100

D 9.100

32. Which statement correctly compares the models?
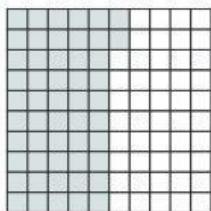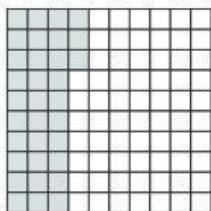
0.52   0.33

A $0.33 > 0.52$

B $0.33 < 0.52$

C $0.52 = 0.33$

D $0.52 < 0.33$

33. Johan found that $\frac{7}{9} = \frac{2}{9} + \frac{4}{9} + \frac{1}{9}$. Which of the following is another way to show $\frac{7}{9}$? Choose all that apply.

A $\frac{3}{9} + \frac{1}{9} + \frac{3}{9}$

B $\frac{1}{9} + \frac{8}{9}$

C $\frac{3}{9} + \frac{4}{9}$

D $\frac{2}{9} + \frac{5}{9}$

34. Which of the following is NOT correct for $1\frac{5}{6}$?

A $1\frac{5}{6} = 1 + \frac{3}{6} + \frac{2}{6}$

B $1\frac{5}{6} = 1 + \frac{2}{6} + \frac{2}{6} + \frac{1}{6}$

C $1\frac{5}{6} = \frac{6}{6} + \frac{2}{6} + \frac{2}{6}$

D $1\frac{5}{6} = \frac{6}{6} + \frac{5}{6}$

LIVEWORKSHEETS

Name _____

Fractions and Decimals
(continued)

Read each question. Then mark your answer on the sheet.

**35.** Marcus is saving his money to buy a new book. He saves $\frac{1}{5}$ of the money he needs each week. After 4 weeks, what fraction of the money has Marcus saved?

   A $\frac{1}{4}$

   B $\frac{1}{5}$

   C $\frac{2}{5}$

   D $\frac{4}{5}$

36. Some friends share a pizza. They eat $\frac{5}{7}$ of the pizza. Which shows how much of the pizza is left?

   A $\frac{2}{7}$

   B $\frac{3}{7}$

   C $\frac{4}{7}$

   D $\frac{5}{7}$

37. What is the sum of $1\frac{4}{8} + 1\frac{3}{8}$?

1

$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$

1

$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$

   A $1\frac{5}{8}$

   B $2\frac{6}{8}$

   C $2\frac{7}{8}$

   D   3

38. Adam puts $\frac{2}{10}$ of his pencils away in the morning. He puts $\frac{7}{10}$ of his pencils away in the afternoon.

Which shows the fraction of pencils that Adam has put away?

   A $\frac{9}{9}$

   B $\frac{5}{10}$

   C $\frac{7}{10}$

   D $\frac{9}{10}$

LIVEWORKSHEETS

Fractions and Decimals
(continued)

Read each question. Then mark your answer on the sheet.

39. Which fraction completes this multiplication equation?

$\frac{4}{7} = 4 \times$?

A $\frac{1}{4}$

B $\frac{1}{7}$

C $\frac{4}{4}$

D $\frac{4}{7}$

40. David cycled $2\frac{7}{8}$ miles from his home. Then he turned around and cycled $1\frac{3}{8}$ miles toward his home. How much farther does David have to cycle to get home?

A $1\frac{2}{8}$ miles

B $1\frac{4}{8}$ miles

C $2\frac{2}{8}$ miles

D $2\frac{4}{8}$ miles

41. Which multiplication sentence describes the model?

$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$

A $6 \times \frac{1}{8} = \frac{6}{8}$

B $7 \times \frac{1}{6} = \frac{7}{6}$

**C** $8 \times \frac{1}{6} = \frac{8}{6}$

D $8 \times 6 = 48$

42. Which shows the sum of $\frac{5}{10} + \frac{7}{100}$?

A $\frac{75}{100}$

B $\frac{57}{100}$

C $\frac{12}{100}$

D $\frac{12}{10}$

LIVEWORKSHEETS

Name _____

Measurement and Geometry

Read each question. Then mark your answer on the sheet.

43. Describe the pair of lines.
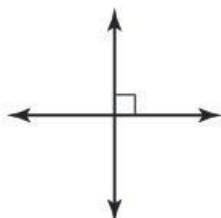
A Parallel lines

B Perpendicular lines

C Rays

D Line segments

44. Jane draw a right triangle. Which could be the shape Jane draws? Choose all that apply.
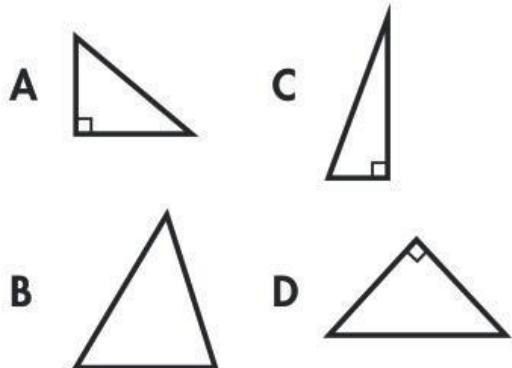
45. Which letter has more than one line of symmetry?

A The letter M

B The letter T

C The letter E

D The letter O

46. Which quadrilateral always has 4 congruent sides and 4 right angles?

A Trapezoid

B Rectangle

C Rhombus

D Square

47. What is the measure of the smaller angle when the clock shows 2 o'clock?

A 30°

B 60°

C 90°

D 180°

48. Ivan measures an angle that turns through 45 unit angles of 1°.

What does Ivan's angle measure?

A 90°

B 46°

C 45°

D 1°

LIVEWORKSHEETS

# Measurement and Geometry

(continued)

Read each question. Then mark your answer on the sheet.

49. What is the measure of angle *PML*?
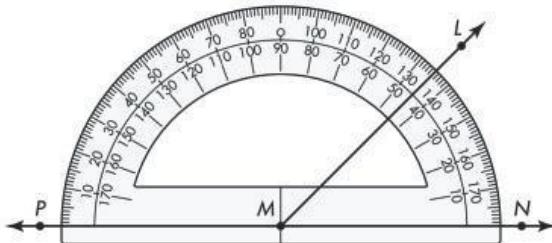
  A   45°

  B   55°

  C   125°

  D   135°

50. If the measure of angle *WXY* is 90° and the measure of angle *WXZ* is 52°, what is the measure of angle *ZXY*?
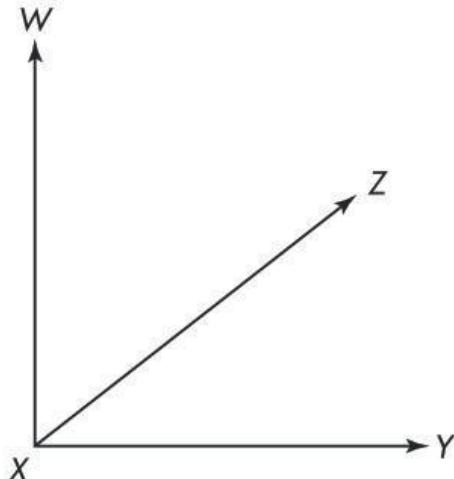
  A   38°

  B   52°

  C   90°

  D   180°

51. Which measurement is greatest?

  A   2,233 milliliters

  B   3,104 milliliters

  C   3 liters

  D   2 liters

52. Brian and Gregory bought 5.9 pounds of dried apple chips. If they divide the dried fruit evenly between themselves, how much dried fruit does each boy get?

  A   2.95 lb

  B   3.95 lb

  C   5.9 lb

  D   29.5 lb

53. Maria created this table to convert hours to minutes. Which numbers are missing? Choose all that apply.

Hours	Minutes
1	60
2	
3	
4	240

  A   100

  B   120

  C   180

  D   220

LIVEWORKSHEETS

Measurement and Geometry
(continued)

Read each question. Then mark your answer on the sheet.

54. Melinda drives a total of 7.9 miles each day to get to and from work. How many miles does Melinda drive in 5 days?

  A   39.5 miles

  B   40.5 miles

  C   395 miles

  D   405 miles

**55.** Chris's watch shows 4:52. He wants to see a movie that starts in 30 minutes. What time does the movie start?

  A   4:22

  B   5:12

  C   5:22

  D   5:32

56. Find the perimeter of the rectangle. You can use the formula $P = 2\ell + 2w$.
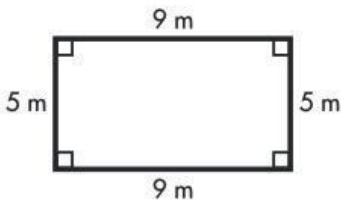
  A   4 m

  B   14 m

  C   28 m

  D   45 m

Use the rectangle below to answer Questions 57 and 58.
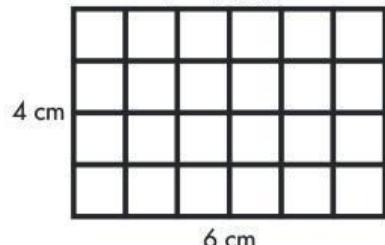
57. Which are the dimensions of another rectangle with the same area as the rectangle above?

  A   3 cm × 4 cm

  B   2 cm × 6 cm

  C   4 cm × 5 cm

  D   3 cm × 8 cm

58. Which are the dimensions of a rectangle with the same perimeter as the rectangle above?

  A   2 cm by 9 cm

  B   5 cm by 4 cm

 **C**   2 cm by 7 cm

  D   5 cm by 5 cm

Name _____

Data Analysis

Read each question. Then mark your answer on the sheet.

Students in Mr. Suarez's class measured the lengths of different strings in centimeters (cm). They recorded the measurements in this line plot below.

Use the line plot to answer Questions 59–62.

String Lengths in Centimeters
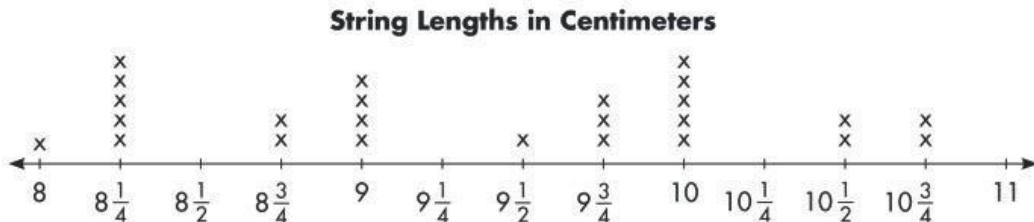
59. Which shows the difference in length between the shortest string and the longest string?

   A $2\frac{3}{4}$ cm

   B $2\frac{1}{2}$ cm

   C   2 cm

   D $1\frac{1}{2}$ cm

60. Which shows the total number of strings measured?

   A   20

   B   22

   C   24

   D   25

61. Which shows the most common lengths for the strings that were measured? Choose all that apply.

   A   8 cm

   B $8\frac{1}{4}$ cm

   C   9 cm

   D   10 cm

62. Kayla measures two strings. The difference in length is $1\frac{3}{4}$ inches. Which shows the lengths of the two strings Kayla measures?

   A   8 cm and $10\frac{3}{4}$ cm

   B $8\frac{1}{4}$ cm and 10 cm

   C $9\frac{1}{2}$ cm and $10\frac{1}{2}$ cm

   D   10 cm and $10\frac{3}{4}$ cm

LIVEWORKSHEETS

Problem Solving

Read each question. Then mark your answer on the sheet.

63. Sue exercised for $1\frac{3}{4}$ hours. First, she used the treadmill for 35 minutes. Then she spent half of the remaining time on the cross trainer. How much time did she spend on the cross trainer?

  A 30 minutes

 **B** 35 minutes

  C 40 minutes

  D 45 minutes

64. Joe drove 630 miles on his 3-day trip. He drove 280 miles on the first day, and 170 miles on the second day. How many miles did he drive on the third day?

  A 80 miles   **C** 220 miles

  B 180 miles   **D** 280 miles

65. Kim and Brad are doing their book reports. Kim has written $2\frac{5}{8}$ pages. Brad has written $\frac{7}{8}$ of a page less than Kim. Which equations can be used to find how many pages Brad has written? Choose all that apply.

  A $2\frac{5}{8} - \frac{7}{8} = 1\frac{6}{8} = 1\frac{3}{4}$

  B $\frac{7}{8} + 2\frac{5}{8} = 2\frac{12}{8} = 3\frac{4}{8} = 3\frac{1}{2}$

  C $\frac{21}{8} - \frac{7}{8} = \frac{14}{8} = 1\frac{6}{8} = 1\frac{3}{4}$

  D $\frac{7}{8} + \frac{21}{8} = \frac{28}{8} = 3\frac{4}{8} = 3\frac{1}{2}$

66. Pedro ate $\frac{1}{4}$ of a pound of nuts. Then he used $\frac{2}{4}$ of a pound of nuts to make muffins. Which drawing could be used to find how many pounds of nuts Jake used in all?
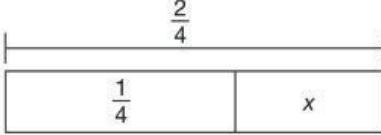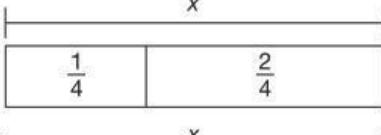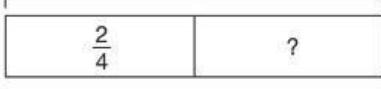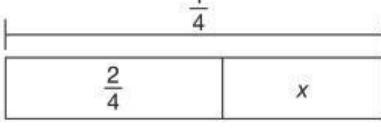
Problem Solving
(continued)

Read each question. Then mark your answer on the sheet.

67. Joan and Ann were using fraction strips to add. Joan added $\frac{2}{5} + \frac{3}{5} + \frac{4}{5}$ and found the sum $1\frac{4}{5}$. Ann wanted to make the same sum with a different set of fractions. Which fractions could Ann use? Choose all that apply.

A $\frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5}$

B $\frac{4}{5} + \frac{3}{5} + \frac{2}{5}$

C $\frac{5}{5} + \frac{4}{5}$

D $\frac{3}{5} + \frac{1}{5} + \frac{5}{5}$

68. Juan's lawn is 30 yards long. Which of the following can be used to find the length of Juan's lawn in inches? Choose all that apply.

A $30 \times 3 \div 12$

B $30 \div 3 \times 12$

C $30 \times 3 \times 12$

D 30×36

LIVEWORKSHEETS