RELEASED ITEMS

MATHEMATICS
GRADE 5

Fall 2007
MICHIGAN STATE BOARD OF EDUCATION
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PART 1

DIRECTIONS
This test has three parts. You may NOT use a calculator on the first part. You may use open space in this test booklet for scratch paper. No additional sheets may be used.

There is one type of item on this test: multiple choice.

Multiple-choice items will require you to choose the best answer from among four answer choices. For these items, use only a No. 2 pencil to mark your answer in your Answer Document. If you erase an answer, be sure to erase it completely. If you skip an item, be sure to mark the answer to the next item in the correct place in your Answer Document.

Sample Multiple-Choice Item:

Jackie had 56 trading cards. She gave some of the cards to Wanda. Then Jackie had 23 trading cards left. What was the total number of trading cards Jackie gave to Wanda?

A  23
B  33
C  39
D  79

For this sample item, the correct answer is B. Circle B is filled in on the sample item in your Answer Document.

You will have at least 30 minutes to finish Part 1 of this test. You will be given additional time if necessary.

1. Once you have reached the word STOP in your test booklet, do NOT go on to the next page.

2. If you finish early, you may check your work in Part 1 of the test ONLY. Do NOT look at items in other parts of the test.

If you do not understand any of these directions, please raise your hand.
1  Which number is a multiple of 3?
   A  83
   B  84
   C  85
   D  86

2  List factors & multiples
   A  multiple, not factor
   B  neither factor nor multiple
   C  neither factor nor multiple
   D  correct

3  Which set does NOT contain any multiples of 4?
   A  \{24, 36, 42, 54\}
   B  \{12, 15, 20, 24\}
   C  \{8, 16, 34, 42\}
   D  \{6, 10, 14, 18\}
4 Use factors & multiples to compose/decompose numbers
   A composed of unallowable factor
   B composed of unallowable factor
   C correct
   D missed one of necessary factors

5 Since $5 \times 20 = 100$, which number will complete the number sentence below to make it true?

   $5 \times \_ \times 5 = 100$

   A 4
   B 5
   C 20
   D 25
6 Use factors & multiples to compose/decompose numbers
   A not a multiple
   B correct
   C not a multiple
   D not a multiple

7 Which has the same value as $57 \times 4$?
   A $(50 \times 4) + (7 \times 4)$
   B $(50 + 5) + 2$
   C $(50 \times 5) + 2$
   D $(50 \times 4) + 7$

8 Solve multiplication problems using the distributive property
   A correct
   B used distributive property
   C used distributive property
   D used distributive property
9 Which of the following is equivalent to $5 \times 23$?
   A  $5 \times 2 \times 3$
   B  $5 \times 20 \times 3$
   C  $(5 \times 2) + (5 \times 3)$
   D  $(5 \times 20) + (5 \times 3)$

10 Divide whole numbers by 1-digit numbers and by 10
   A  incorrect quotient, incorrect remainder
   B  correct
   C  incorrect quotient, incorrect remainder
   D  incorrect quotient, correct remainder

11 Divide $2,520 \div 10$
   A  25,200
   B  2,530
   C  253
   D  252
12 Divide whole numbers by 1-digit numbers and by 10
   A correct
   B correct quotient, incorrect remainder
   C incorrect quotient, correct remainder
   D incorrect quotient, incorrect remainder

13 What value of \( n \) makes the equation below true?
   \[ n \div 7 = 21 \]
   A 3
   B 28
   C 141
   D 147

14 Find value of unknowns in equations
   A correct
   B incorrect divisor
   C subtracted quotient from dividend
   D added quotient to dividend
15 What value of $p$ makes the equation below true?

$$270 \div p = 27$$

A 7  
B 8  
C 9  
D 10

16 Translate between fractions & decimals

A correct  
B incorrect numerator, incorrect denominator  
C correct numerator, incorrect denominator  
D correct numerator, incorrect denominator
17 Which of the following represents seventy-five hundredths?

   A  75,000.0 
   B  7,500.0 
   C  0.75  
   D  0.075

18 Translate between fractions & decimals

   A  incorrect numerator, incorrect denominator
   B  incorrect numerator, incorrect denominator
   C  incorrect numerator, incorrect denominator
   D  correct
PART 2

DIRECTIONS

You will now begin Part 2 of this test. You may use a calculator on this part of the test, and you may use open space in this test booklet for scratch paper. No additional sheets may be used.

If you finish early, you may check your work for Part 2 ONLY.

Do NOT look at items in other parts of this test.

You will have at least 50 minutes to finish Part 2 of this test.
19 The square grid below represents one whole.

Which best represents the shaded part of the grid?

A  0.047
B  0.47
C  4.70
D  47.0

20 Know decimals up to two places & relate to money

A  correct
B  place value error
C  place value error
D  place value error
21 Which shows the word form of 42.32?
   A  forty-two and thirty-two tenths
   B  forty-two and thirty-two hundredths
   C  four thousand, two hundred thirty-two
   D  four hundred twenty-three and two tenths

22 Know & use approximation appropriately
   A  place value error
   B  place value error
   C  correct
   D  place value error

23 Which of the following is closest to $5 \times 1,242$?
   A  600
   B  6,000
   C  600,000
   D  6,000,000
24 Know & use approximation appropriately
   A place value error
   B place value error
   C correct
   D place value error

25 Which is most likely the length of a telephone book?
   A 30 kilometers
   B 30 centimeters
   C 30 millimeters
   D 30 meters

26 Give answers to a reasonable degree of precision
   A used scale improperly
   B misread scale
   C correct
   D used scale improperly
27 Florence is making a sail for a toy boat. The sail needs to be 3.55 cm wide. Which measure would be most useful in making the sail?

A  to the nearest millimeter
B  to the nearest decimeter
C  to the nearest meter
D  to the nearest kilometer

28 Know and understand formulas for P/A of square, rectangle

A  length of two sides
B  correct
C  perimeter
D  doubled the perimeter
29 What is the perimeter of the figure below?

A 12 feet
B 18 feet
C 24 feet
D 36 feet

30 Know and understand formulas for P/A of square, rectangle

A added length and width to find area
B added two lengths and width to find area
C perimeter
D correct
31 Which triangle appears to be equilateral?

A

B

C

D
32 Identify basic geometric shapes and solve problems

A correct
B greater than length of side of triangle
C length of two sides of triangle
D perimeter of triangle plus length of extra base

33 Triangle ABC is an equilateral triangle. Two of the sides of the triangle each measure 3 inches in length. What is the length of the third side of the triangle?

A 2 inches
B 3 inches
C 4 inches
D 5 inches

34 Recognize transformations of a 2-D object

A translation, not turn
B correct
C reflection
D dilation
35 Which of the following appears to show only a single flip of the quadrilateral?

A

B

C

D

36 Recognize transformations of a 2-D object

A  rotation (not slide) followed by rotation (not turn)
B  rotation followed by rotation
C  correct
D  rotation followed by reflection
37 The chart below shows the number of minutes that Katie spent on her computer each day for one week.

<table>
<thead>
<tr>
<th>Katie’s Computer Time</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Day</strong></td>
</tr>
<tr>
<td>Sunday</td>
</tr>
<tr>
<td>Monday</td>
</tr>
<tr>
<td>Tuesday</td>
</tr>
<tr>
<td>Wednesday</td>
</tr>
<tr>
<td>Thursday</td>
</tr>
<tr>
<td>Friday</td>
</tr>
<tr>
<td>Saturday</td>
</tr>
</tbody>
</table>

What number represents the median of the data in the chart?

A  47
B  53
C  59
D  84

38 Order a given set of data, find the median, range

A  maximum
B  correct
C  difference of first and last data point, not range
D  median
Which score represents the median of the given data?

Math Test Scores

<table>
<thead>
<tr>
<th>Student</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joe</td>
<td>73</td>
</tr>
<tr>
<td>Sara</td>
<td>86</td>
</tr>
<tr>
<td>Carl</td>
<td>90</td>
</tr>
<tr>
<td>Dave</td>
<td>73</td>
</tr>
<tr>
<td>Maria</td>
<td>81</td>
</tr>
</tbody>
</table>

A  73  
B  81  
C  86  
D  90  

PART 3

DIRECTIONS

You will now begin Part 3 of this test. You may use a calculator on this part of the test, and you may use open space in this test booklet for scratch paper. No additional sheets may be used.

If you finish early, you may check your work for Part 3 ONLY.

Do NOT look at items in other parts of this test.

You will have at least 50 minutes to finish Part 3 of this test.
40 Locate fractions w/denominators <=12 on number line
  A location of fractional portion of mixed number
  B location of whole number portion of mixed number
  C correct
  D greater value than mixed number given

41 Which of the following best represents the location of point X on the number line below?

- A $1\frac{1}{4}$
- B $1\frac{1}{2}$
- C $1\frac{3}{4}$
- D $2\frac{1}{4}$
42 Locate fractions w/denominators <=12 on number line
   A incorrect comparison
   B incorrect comparison
   C correct
   D incorrect comparison

43 Which unit can be used to record the length of a pencil?
   A gram
   B liter
   C kilogram
   D centimeter

44 Measure using common tools & appropriate units
   A underestimated length
   B correct
   C overestimated length
   D overestimated length
45 Which unit could be used to record the weight of a 10-year-old child?

A  meter
B  kilogram
C  millimeter
D  centiliter

46 Measure & compare integer temperatures in degrees

A  first temperature in table
B  lowest temperature, highest absolute value
C  correct
D  zero degrees
47 Theo recorded the high and low temperatures for 5 days one week. The table below shows the data he recorded.

<table>
<thead>
<tr>
<th>Day</th>
<th>High Temperature (°F)</th>
<th>Low Temperature (°F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>9</td>
<td>-2</td>
</tr>
<tr>
<td>Tuesday</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>Wednesday</td>
<td>-2</td>
<td>-7</td>
</tr>
<tr>
<td>Thursday</td>
<td>-4</td>
<td>-8</td>
</tr>
<tr>
<td>Friday</td>
<td>5</td>
<td>-2</td>
</tr>
</tbody>
</table>

On which day was there the greatest change between the high temperature and the low temperature?

A Monday
B Tuesday
C Thursday
D Friday

48 Measure & compare integer temperatures in degrees

A zero degrees
B highest temperature
C correct
D last temperature in table
49. What is the width of a rectangle that has a length of 6 feet and an area of 60 square feet?
   A. 10 feet
   B. 12 feet
   C. 24 feet
   D. 66 feet

50. Find length of rectangle given width and area or perimeter
   A. two lengths
   B. greater than length
   C. length, not width
   D. correct

51. What is the width of a rectangle with a length of 5 inches and a perimeter of 16 inches?
   A. 2 inches
   B. 3 inches
   C. 8 inches
   D. 21 inches
52 Identify attributes of 3-D solids

A  incorrect statement about cubes
B  incorrect statement about cubes
C  incorrect statement about cubes
D  correct

53 What is the total number of faces in the rectangular prism pictured below?

A  3
B  4
C  5
D  6

54 Identify attributes of 3-D solids

A  less than total number of faces
B  less than total number of faces
C  correct
D  greater than total number of faces
55 The chart below shows the amount of time Erin and Amanda each spent on the phone each day last week.

<table>
<thead>
<tr>
<th>Day</th>
<th>Erin’s Minutes</th>
<th>Amanda’s Minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>8</td>
<td>15</td>
</tr>
<tr>
<td>Tuesday</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Wednesday</td>
<td>30</td>
<td>45</td>
</tr>
<tr>
<td>Thursday</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>Friday</td>
<td>25</td>
<td>30</td>
</tr>
<tr>
<td>Saturday</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>Sunday</td>
<td>5</td>
<td>25</td>
</tr>
</tbody>
</table>

How many more minutes did Amanda spend on the phone last week than Erin?

A 10
B 15
C 20
D 260

56 Solve problems using data tables, bar graphs

A greatest for different category
B correct
C least total
D greatest for different category
57 The chart below shows the number of bags of chips bought by students in several grades.

**Bags of Chips Bought**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Number of Bags</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>64</td>
</tr>
<tr>
<td>3</td>
<td>79</td>
</tr>
<tr>
<td>4</td>
<td>89</td>
</tr>
<tr>
<td>5</td>
<td>56</td>
</tr>
</tbody>
</table>

How many more bags of chips did the fourth graders buy than the third graders?

A 10  
B 15  
C 25  
D 33

58 Construct tables and bar graphs from given data

A no scale given  
B scale of convenience  
C two bars graphed incorrectly  
D correct
59 Which two points appear to lie on a line perpendicular to line CD?

A
B
C
D

60 Recognize plane figures that have line symmetry

A no line symmetry
B no line symmetry
C no line symmetry
D correct
61 Which measure is equivalent to 3 meters?

(1 meter = 100 centimeters)

A 3 centimeters
B 30 centimeters
C 300 centimeters
D 3000 centimeters

62 Find side of a square given its perimeter or area

A number of sides
B correct
C length of two sides
D area
63 Which figure appears to be a right angle?

A

B

C

D

64 Add and subtract whole numbers fluently

A place value error

B subtracted lesser face values from greater face values

C place value error

D correct
65 Multiply $400 \times 35$

A 3,200
B 3,340
C 12,000
D 14,000

66 Estimate answers involving $+, -, \text{ or } \times$

A place value error, underestimate
B place value error, underestimate
C correct
D place value error, overestimate

67 Which list shows the numbers in order from least to greatest?

A 5,010 5,001 501 510 50,100
B 5,001 501 50,100 510 5,010
C 501 510 5,010 5,001 50,100
D 501 510 5,001 5,010 50,100
68  Compose & decompose numbers to 1,000,000
   A  place value error
   B  place value error
   C  place value error
   D  correct

69  What is the value of the digit 6 in the number below?
    425,963
   A  6
   B  60
   C  600
   D  600,000

70  List all factors & factor pairs of numbers to 50
   A  omitted two factors
   B  included 3 non-factors, omitted 2 factors
   C  omitted 2 factors
   D  correct
71. Which of the following best describes the location of point X on the number line below?

A. 0.2
B. 0.8
C. 2.0
D. 8.0

72. Read, write, interpret, and compare decimals

A. incorrect comparison
B. incorrect comparison
C. incorrect comparison
D. correct
73 Which of the following shows exactly $\frac{2}{5}$ of the group shaded?

A

B

C

D
74. Know prime numbers
   A. composite number
   B. composite number
   C. correct
   D. composite number

75. Maria had 30 stuffed animals. She put exactly 6 stuffed animals on each shelf of her bookcase. What is the least number of shelves the bookcase could have had?
   A. 5
   B. 6
   C. 24
   D. 180

76. Explain why equivalent fractions are equal
   A. non-equivalent fraction
   B. non-equivalent fraction
   C. correct
   D. non-equivalent fraction
77 Emily is using fraction strips like the one below to do her homework.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1/2</td>
<td>1/2</td>
</tr>
<tr>
<td>1/4</td>
<td>1/4</td>
<td>1/4</td>
</tr>
<tr>
<td>1/8</td>
<td>1/8</td>
<td>1/8</td>
</tr>
</tbody>
</table>

Which statement below is true?

A \[ \frac{1}{2} = \frac{2}{8} \]

B \[ \frac{2}{4} = \frac{5}{8} \]

C \[ \frac{1}{2} = \frac{4}{8} \]

D \[ \frac{3}{4} = \frac{5}{8} \]
78 Write improper fractions as mixed numbers

A incorrect mixed number
B incorrect mixed number
C correct
D incorrect mixed number

79 Which lists the numbers in order from least to greatest?

A \( \frac{7}{8}, \frac{3}{4}, \frac{1}{1} \)

B \( 1\frac{3}{4}, \frac{1}{2}, 1 \)

C \( 1\frac{1}{4}, \frac{6}{8}, 2 \)

D \( 1\frac{1}{3}, 1\frac{1}{2}, \frac{3}{4} \)
80 Solve problems about P/A of rectangles in compound shapes
   A added most of labeled sides
   B added only labeled measurements
   C omitted one unlabeled side from total
   D correct

81 Kari wants to wrap a present for a friend. She wants to cover a box that is in the shape of a cube. She knows that the edge of each face measures 6 inches.

What is the least amount of wrapping paper she will need to completely cover the box?
   A 24 square inches
   B 36 square inches
   C 144 square inches
   D 216 square inches
82 Add and subtract decimals through hundredths
   A correct
   B subtraction error
   C subtraction error
   D added instead of subtracted

83 Divide 5.7 ÷ 3
   A 0.52
   B 1.2
   C 1.7
   D 1.9

84 Know & identify terminating decimals
   A correct
   B misinterpretation of meaning of decimal
   C place value error
   D misinterpretation of meaning of decimal
85 Which point on the number line appears to be located at $\frac{6}{4}$?

- A point A
- B point B
- C point C
- D point D

86 Use $x, \div$ to simplify computations & check results

- A incorrect number sentence
- B incorrect number sentence
- C correct
- D incorrect number sentence
87 Add $\frac{7}{12} + \frac{4}{12}$

A $\frac{28}{12}$

B $\frac{11}{12}$

C $\frac{11}{24}$

D $\frac{28}{144}$

88 Solve fraction problems involving sums & differences

A correct

B incorrect difference

C sum of subtrahends, not difference

D one of subtrahends in simplest form
89 Which value of \( m \) makes the equation below true?

\[
\frac{6}{8} - m = \frac{2}{8}
\]

A \( \frac{2}{8} \)

B \( \frac{4}{8} \)

C \( \frac{3}{1} \)

D \( \frac{4}{0} \)

90 \times \text{fractions using repeated }+, \text{ area or array models}

A multiplication is sum of factors

B multiplication is sum of factor & reciprocal of factor

C multiplication is repeated multiplication

D correct
91 Which of the number sentences below can be used to solve this word problem?

Robert recorded 4.75 inches of rain last week. He recorded 2.32 inches of rain this week. How many more inches of rain did Robert record last week than this week?

A  $4.75 - 2.32 = \square$
B  $4.75 + 2.32 = \square$
C  $4.75 \div 2.32 = \square$
D  $4.75 \times 2.32 = \square$
### Scoring Key: Part 1

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Correct Answer</th>
<th>GLCE</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>B</td>
<td>N.ME.04.05</td>
<td>Core-NC</td>
<td>List factors &amp; multiples</td>
</tr>
<tr>
<td>2</td>
<td>D</td>
<td>N.ME.04.05</td>
<td>Core-NC</td>
<td>List factors &amp; multiples</td>
</tr>
<tr>
<td>3</td>
<td>D</td>
<td>N.ME.04.05</td>
<td>Core-NC</td>
<td>List factors &amp; multiples</td>
</tr>
<tr>
<td>4</td>
<td>C</td>
<td>N.MR.04.07</td>
<td>Core-NC</td>
<td>Use factors &amp; multiples to compose/decompose numbers</td>
</tr>
<tr>
<td>5</td>
<td>A</td>
<td>N.MR.04.07</td>
<td>Core-NC</td>
<td>Use factors &amp; multiples to compose/decompose numbers</td>
</tr>
<tr>
<td>6</td>
<td>B</td>
<td>N.MR.04.07</td>
<td>Core-NC</td>
<td>Use factors &amp; multiples to compose/decompose numbers</td>
</tr>
<tr>
<td>7</td>
<td>A</td>
<td>N.ME.04.09</td>
<td>Core-NC</td>
<td>Solve x problems using the distributive property</td>
</tr>
<tr>
<td>8</td>
<td>A</td>
<td>N.ME.04.09</td>
<td>Core-NC</td>
<td>Solve x problems using the distributive property</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
<td>N.ME.04.09</td>
<td>Core-NC</td>
<td>Solve x problems using the distributive property</td>
</tr>
<tr>
<td>10</td>
<td>B</td>
<td>N.FL.04.11</td>
<td>Core-NC</td>
<td>Divide whole numbers by 1-digit numbers and by 10</td>
</tr>
<tr>
<td>11</td>
<td>D</td>
<td>N.FL.04.11</td>
<td>Core-NC</td>
<td>Divide whole numbers by 1-digit numbers and by 10</td>
</tr>
<tr>
<td>12</td>
<td>A</td>
<td>N.FL.04.11</td>
<td>Core-NC</td>
<td>Divide whole numbers by 1-digit numbers and by 10</td>
</tr>
<tr>
<td>13</td>
<td>D</td>
<td>N.FL.04.12</td>
<td>Core-NC</td>
<td>Find value of unknowns in equations</td>
</tr>
<tr>
<td>14</td>
<td>A</td>
<td>N.FL.04.12</td>
<td>Core-NC</td>
<td>Find value of unknowns in equations</td>
</tr>
<tr>
<td>15</td>
<td>D</td>
<td>N.FL.04.12</td>
<td>Core-NC</td>
<td>Find value of unknowns in equations</td>
</tr>
<tr>
<td>16</td>
<td>A</td>
<td>N.MR.04.19</td>
<td>Core-NC</td>
<td>Translate between fractions &amp; decimals</td>
</tr>
<tr>
<td>17</td>
<td>C</td>
<td>N.MR.04.19</td>
<td>Core-NC</td>
<td>Translate between fractions &amp; decimals</td>
</tr>
<tr>
<td>18</td>
<td>D</td>
<td>N.MR.04.19</td>
<td>Core-NC</td>
<td>Translate between fractions &amp; decimals</td>
</tr>
</tbody>
</table>

NC=Non Calculator
## Scoring Key: Part 2

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Correct Answer</th>
<th>GLCE</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>B</td>
<td>N.ME.04.15</td>
<td>Core</td>
<td>Know decimals up to two places &amp; relate to money</td>
</tr>
<tr>
<td>20</td>
<td>A</td>
<td>N.ME.04.15</td>
<td>Core</td>
<td>Know decimals up to two places &amp; relate to money</td>
</tr>
<tr>
<td>21</td>
<td>B</td>
<td>N.ME.04.15</td>
<td>Core</td>
<td>Know decimals up to two places &amp; relate to money</td>
</tr>
<tr>
<td>22</td>
<td>C</td>
<td>N.FL.04.35</td>
<td>Core</td>
<td>Know &amp; use approximation appropriately</td>
</tr>
<tr>
<td>23</td>
<td>B</td>
<td>N.FL.04.35</td>
<td>Core</td>
<td>Know &amp; use approximation appropriately</td>
</tr>
<tr>
<td>24</td>
<td>C</td>
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<td>Core</td>
<td>Know &amp; use approximation appropriately</td>
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<tr>
<td>25</td>
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<td>Core</td>
<td>Give answers to a reasonable degree of precision</td>
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<tr>
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<tr>
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</tr>
<tr>
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<td>Know and understand formulas for P/A of square, rect</td>
</tr>
<tr>
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<td>Core</td>
<td>Know and understand formulas for P/A of square, rect</td>
</tr>
<tr>
<td>31</td>
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<td>G.GS.04.02</td>
<td>Core</td>
<td>Identify basic geometric shapes and solve problems</td>
</tr>
<tr>
<td>32</td>
<td>A</td>
<td>G.GS.04.02</td>
<td>Core</td>
<td>Identify basic geometric shapes and solve problems</td>
</tr>
<tr>
<td>33</td>
<td>B</td>
<td>G.GS.04.02</td>
<td>Core</td>
<td>Identify basic geometric shapes and solve problems</td>
</tr>
<tr>
<td>34</td>
<td>B</td>
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<td>Core</td>
<td>Recognize transformations of a 2-D object</td>
</tr>
<tr>
<td>35</td>
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<td>Core</td>
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<td>37</td>
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<td>Order a given set of data, find the median, range</td>
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<td>Core</td>
<td>Order a given set of data, find the median, range</td>
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<td>B</td>
<td>D.RE.04.02</td>
<td>Core</td>
<td>Order a given set of data, find the median, range</td>
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MDE/MEAP RELEASED ITEMS
## Scoring Key: Part 3

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Correct Answer</th>
<th>GLCE</th>
<th>Type</th>
<th>Description</th>
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<tbody>
<tr>
<td>40</td>
<td>C</td>
<td>N.MR.04.22</td>
<td>Core</td>
<td>Locate fractions with denominators ≤12 on number line</td>
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<tr>
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<td>Locate fractions with denominators ≤12 on number line</td>
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<tr>
<td>42</td>
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<td>Core</td>
<td>Locate fractions with denominators ≤12 on number line</td>
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<tr>
<td>43</td>
<td>D</td>
<td>M.UN.04.01</td>
<td>Core</td>
<td>Measure using common tools &amp; appropriate units</td>
</tr>
<tr>
<td>44</td>
<td>B</td>
<td>M.UN.04.01</td>
<td>Core</td>
<td>Measure using common tools &amp; appropriate units</td>
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<tr>
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<td>Core</td>
<td>Measure using common tools &amp; appropriate units</td>
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<td>46</td>
<td>C</td>
<td>M.UN.04.03</td>
<td>Core</td>
<td>Measure &amp; compare integer temperatures in degrees</td>
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<td>47</td>
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<td>Measure &amp; compare integer temperatures in degrees</td>
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<td>Core</td>
<td>Measure &amp; compare integer temperatures in degrees</td>
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<td>Find length of rectangle given width and A or P</td>
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<td>Find length of rectangle given width and A or P</td>
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<td>Find length of rectangle given width and A or P</td>
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<td>Core</td>
<td>Identify attributes of 3-D solids</td>
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<td>53</td>
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<td>G.SR.04.03</td>
<td>Core</td>
<td>Identify attributes of 3-D solids</td>
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<td>54</td>
<td>C</td>
<td>G.SR.04.03</td>
<td>Core</td>
<td>Identify attributes of 3-D solids</td>
</tr>
<tr>
<td>55</td>
<td>C</td>
<td>D.RE.04.03</td>
<td>Core</td>
<td>Solve problems using data tables, bar graphs</td>
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<tr>
<td>56</td>
<td>B</td>
<td>D.RE.04.03</td>
<td>Core</td>
<td>Solve problems using data tables, bar graphs</td>
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<tr>
<td>57</td>
<td>A</td>
<td>D.RE.04.03</td>
<td>Core</td>
<td>Solve problems using data tables, bar graphs</td>
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<tr>
<td>58</td>
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<td>D.RE.04.01</td>
<td>Extended</td>
<td>Construct tables and bar graphs from given data</td>
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<tr>
<td>59</td>
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<td>Extended</td>
<td>Identify, draw, parallel, &amp; intersecting lines</td>
</tr>
<tr>
<td>60</td>
<td>D</td>
<td>G.TR.04.04</td>
<td>Extended</td>
<td>Recognize plane figures that have line symmetry</td>
</tr>
<tr>
<td>Item No.</td>
<td>Correct Answer</td>
<td>GLCE</td>
<td>Type</td>
<td>Description</td>
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<td>Convert units of measure within a system</td>
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<tr>
<td>62</td>
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<td>Extended</td>
<td>Find side of a square given its perimeter or area</td>
</tr>
<tr>
<td>63</td>
<td>C</td>
<td>M.TE.04.10</td>
<td>Extended</td>
<td>Know right angles &amp; compare angles to right angles</td>
</tr>
<tr>
<td>64</td>
<td>D</td>
<td>N.FL.04.08</td>
<td>Extended-NC</td>
<td>Add and subtract whole numbers fluently</td>
</tr>
<tr>
<td>65</td>
<td>D</td>
<td>N.FL.04.10</td>
<td>Extended-NC</td>
<td>Multiply whole numbers &amp; use distributive property</td>
</tr>
<tr>
<td>66</td>
<td>C</td>
<td>N.FL.04.34</td>
<td>Extended</td>
<td>Estimate answers involving +, -, or x</td>
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<tr>
<td>67</td>
<td>D</td>
<td>N.ME.04.01</td>
<td>Extended-NC</td>
<td>Read, write, compare &amp; order numbers to 1,000,000</td>
</tr>
<tr>
<td>68</td>
<td>D</td>
<td>N.ME.04.02</td>
<td>Extended-NC</td>
<td>Compose &amp; decompose numbers to 1,000,000</td>
</tr>
<tr>
<td>69</td>
<td>B</td>
<td>N.ME.04.03</td>
<td>Extended-NC</td>
<td>Know size &amp; place value of numbers to 1,000,000</td>
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<tr>
<td>70</td>
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<td>Extended-NC</td>
<td>List all factors &amp; factor pairs of numbers to 50</td>
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<tr>
<td>71</td>
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<td>Locate tenths and hundredths on a number line</td>
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<tr>
<td>72</td>
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<td>Extended</td>
<td>Read, write, interpret, and compare decimals</td>
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<td>73</td>
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<td>Understand fractions as parts of a set of objects</td>
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<td>74</td>
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<td>Know prime numbers</td>
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<td>Solve problems involving multiplication &amp; division</td>
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<td>76</td>
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<td>Explain why equivalent fractions are equal</td>
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<td>77</td>
<td>C</td>
<td>N.MR.04.23</td>
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<td>Understand relationships within fraction families</td>
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<tr>
<td>78</td>
<td>C</td>
<td>N.MR.04.25</td>
<td>Extended</td>
<td>Write improper fractions as mixed numbers</td>
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<tr>
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<td>D</td>
<td>N.MR.04.26</td>
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<td>Compare and order up to three fractions</td>
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<tr>
<td>80</td>
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<td>M.PS.04.09</td>
<td>Future</td>
<td>Solve problems about P/A of rects in compound shapes</td>
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### Scoring Key: Part 3 (continued)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Correct Answer</th>
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<td>M.PS.04.11</td>
<td>Future</td>
<td>Solve contextual problems about surface area</td>
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<tr>
<td>82</td>
<td>A</td>
<td>N.FL.04.32</td>
<td>Future</td>
<td>Add and subtract decimals through hundredths</td>
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<tr>
<td>83</td>
<td>D</td>
<td>N.FL.04.33</td>
<td>Future</td>
<td>x and ÷ decimals up to two decimal places</td>
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<tr>
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<td>A</td>
<td>N.ME.04.16</td>
<td>Future</td>
<td>Know &amp; identify terminating decimals</td>
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<tr>
<td>85</td>
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<td>N.ME.04.24</td>
<td>Future</td>
<td>Understand improper fractions, locate on # line</td>
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<tr>
<td>86</td>
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<td>Use x, ÷ to simplify computations &amp; check results</td>
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<tr>
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<td>Future</td>
<td>Add and subtract common fractions less than 1</td>
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<td>Future</td>
<td>Solve fraction problems involving sums &amp; differences</td>
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<tr>
<td>89</td>
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<td>Future-NC</td>
<td>Find value of unknown in equations with fractions</td>
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<td>90</td>
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<td>N.MR.04.30</td>
<td>Future</td>
<td>x fractions using repeated +, area or array models</td>
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<tr>
<td>91</td>
<td>A</td>
<td>N.MR.04.31</td>
<td>Future</td>
<td>Solve problems by adding &amp; subtracting decimals</td>
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