MICHIGAN STATE BOARD OF EDUCATION
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The Michigan State Board of Education complies with all Federal laws and regulations prohibiting discrimination and with all requirements and regulations of the U.S. Department of Education. It is the policy of the Michigan State Board of Education that no person on the basis of race, color, religion, national origin or ancestry, age, sex, marital status, or handicap shall be discriminated against, excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination in any program or activity for which it is responsible or for which it receives financial assistance from the U.S. Department of Education.
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 are two types of items on this test: multiple-choice and open-ended.

1. Multiple-choice items will require you to choose the best answer from among the 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.

2. An open-ended item will be found in your test booklet and require you to write, explain, or show your work. For this item show all of your work neatly and clearly in the space provided 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.
Sample Open-Ended Item:

The Lopez children went to the movies. They wanted to buy a tub of popcorn that cost $1.35. They counted their money and had the following:

- Maria had 2 quarters.
- Carlos had 40 cents in dimes.
- Luis had the same number of nickels as Carlos had dimes.
- Ana had 2 dimes and 2 nickels.

Did the Lopez children have enough money to buy the popcorn? Explain how you arrived at your answer. Show all of your work.

\[
\begin{array}{r}
\$ \text{.50} & \text{Maria} \\
\$ \text{.40} & \text{Carlos} \\
\$ \text{.20} & \text{Luis} \\
\$ \text{.20} & \text{Ana} \\
\$ \text{.10} & \text{Ana} \\
\hline
\$ \text{1.40} \\
\end{array}
\]

Yes. They had 5 cents more than they needed.

For this sample item you would answer yes and explain that the Lopez children had 5 cents more than they needed. Remember to show your work.

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 shows one thousand forty-nine written as a numeral?
   A. 149
   B. 1,049
   C. 1,409
   D. 1,490

2. Which shows 7,638 written in words?
   A. seventy thousand, six hundred thirty-eight
   B. seven thousand, six hundred thirty-eight
   C. seventy six hundred eight
   D. seven thousand thirty-eight

3. Which represents two thousand six hundred nine dollars?
   A. $2,609
   B. $2,690
   C. $6,920
   D. $9,062
4  How can 742 be written in numerals and words?
   A  74 hundreds and 2 ones
   B  700 hundreds and 42 ones
   C  7 hundreds, 4 tens, and 2 ones
   D  7 hundreds, 40 tens, and 2 ones

5  Which of these numbers has a 5 in the hundreds place and a 3 in the ones place?
   A  503
   B  530
   C  5,003
   D  5,300

6  Which of these numbers has a 3 in the thousands place and a 4 in the hundreds place?
   A  3,004
   B  3,420
   C  4,330
   D  4,643
7. The Central Zoo has 78 monkeys and 97 birds. How many more birds are there than monkeys?
   
   A   9  
   B   11  
   C   19  
   D   21  

8. The Mississippi River is 2,348 miles long. The Missouri River is 2,315 miles long. How much longer is the Mississippi River than the Missouri River?
   
   A   3 miles  
   B   33 miles  
   C   333 miles  
   D   2,333 miles  

9. The school store has 55 pencils in one jar and 17 pencils in another jar. How many pencils does the store have in these two jars?
   
   A   42  
   B   62  
   C   72  
   D   612
10 Farmer Green has 412 chickens, and Farmer Brown has 285 chickens. Which is closest to how many more chickens Farmer Green has than Farmer Brown?

A 100
B 200
C 300
D 700

11 There are 321 third grade students at East School. The number of girls in the third grade is 188. Which is closest to the number of boys in the third grade at East School?

A 130
B 200
C 400
D 510

12 At 5:00, there were 423 people in a movie theater. Paul counted 19 more people who went in after that time. Which is closest to the total number of people in the movie theater then?

A 400
B 420
C 440
D 450
13. A multiplication fact is $9 \times 10 = 90$. Which of these number sentences is in the same fact family?

A. $90 \div 10 = 9$
B. $90 \times 10 = 80$
C. $90 + 10 = 100$
D. $90 \times 10 = 900$

14. A division fact is $30 \div 6 = 5$. Which of these number sentences is in the same fact family?

A. $6 \times 1 = 6$
B. $5 \times 6 = 30$
C. $5 \times 30 = 150$
D. $6 \times 30 = 180$
15 Which number goes in the box to complete the following fact family?

\[4 \times 8 = 32\]
\[8 \times 4 = 32\]
\[32 \div 8 = \square\]
\[32 \div 4 = 8\]

A 9
B 8
C 7
D 6

16 Which mathematics fact has a value different from the others?

A \[15 \div 3\]
B \[25 \div 5\]
C \[1 \times 5\]
D \[10 \div 5\]

17 Pat’s little sister has 6 picture books. Each picture book has 8 pages. How many pages are there in all the picture books combined?

A 24
B 42
C 48
D 54
18 Which of the following does NOT equal 20?

A  $9 \times 2$
B  $4 \times 5$
C  $2 \times 10$
D  $5 \times 4$
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 There are 20 people at a family party. Each family has 4 people. Which of the following can be used to find the number of families at the party?

A 20 + 4  
B 20 × 4  
C 20 − 4  
D 20 ÷ 4

20 Mrs. Spears bought 12 packages of juice boxes. There are 3 juice boxes in each package. Which number sentence shows how to find the total number of juice boxes?

A 3 + □ = 12  
B 12 × 3 = □  
C 12 ÷ □ = 3  
D □ × 12 = 3

21 Tamara is 5 years older than her 8-year-old brother. Which expression represents Tamara’s age?

A 8 − 5  
B 8 + 5  
C 8 × 5  
D 8 ÷ 5
22 The swimming pool shown below is divided into lanes. What is the denominator of the fraction that shows how much of the pool is one lane?

| A | 1 |
| B | 4 |
| C | 6 |
| D | 8 |
23 Which fraction best represents the part of the circle that is labeled red?

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

B \[ \frac{4}{4} \]

C \[ \frac{2}{2} \]

D \[ \frac{2}{4} \]
24 Lisa and a friend are running on the school track. Which fraction shows how much of the track is taken up by the lanes they are using?

A \[ \frac{2}{6} \]
B \[ \frac{2}{4} \]
C \[ \frac{4}{6} \]
D \[ \frac{4}{2} \]

25 The clocks show the time Nathan went outside and the time that he came back in. How long did Nathan stay outside?

A 1 hour, 25 minutes
B 1 hour, 35 minutes
C 2 hours, 25 minutes
D 2 hours, 35 minutes
26 Every year, Beto’s mother marks his height on the door. Which is closest to Beto’s height this year?

A  3 feet, 4 inches
B  3 feet, 8 inches
C  4 feet, 4 inches
D  4 feet, 8 inches
27 Which best represents the weight of the bunch of bananas?

2 pounds, 6 ounces
2 pounds, 12 ounces
3 pounds, 4 ounces
3 pounds, 12 ounces

28 What temperature is freezing in °C?
212°C
100°C
32°C
0°C
29 At what temperature will water boil in degrees F?
   A  212°F
   B  100°F
   C  32°F
   D  0°F

30 At which temperature should Kelly set her freezer in order to freeze water and make ice cubes?
   A  10°C
   B  20°C
   C  25°F
   D  35°F

31 Kent had $10.00 to buy a gift for his brother. Kent spent $8.65 on the gift. How much money did he have left?
   A  $1.35
   B  $1.45
   C  $2.45
   D  $2.65
32 How much will Peggy owe if she buys one of each item below?

$1.35  
$4.25  
$2.50

A  $7.00  
B  $7.10  
C  $8.00  
D  $8.10

33 Brendon has $11.83. Katie has $10.40. How much more money does Brendon have than Katie?

A  $0.43  
B  $1.13  
C  $1.43  
D  $22.23
34 Which of the following may NOT have a square as its base?

A  cube
B  pyramid
C  cone
D  rectangular prism

35 Which figure shown below has only one face that is a circle?

A  
B  
C  
D  

![Diagram of shape options]
36 Exactly how many edges does this prism have?

A 3
B 5
C 6
D 9
37 The bar graph below shows the colors of marbles in a bag. What is the maximum number of marbles of one color in the bag?

![Bar graph showing marbles in a bag with the following counts: Red - 16, Blue - 17, Green - 18, Yellow - 19.]

A 16  
B 17  
C 18  
D 19
38 The graph below shows the number of medals won for different sports. What is the range of the data?

**Answer Options:**
- A 8
- B 10
- C 12
- D 18
39 What is the least number of animals shown on the graph?

![Bar Graph of Animals Seen on Car Trip]

- **Horses**: 4
- **Pigs**: 2
- **Cows**: 10
- **Chickens**: 4

**A** 1  
**B** 2  
**C** 5  
**D** 10
You have been working on Part 2.

If you finish early, you may go back and check your work for Part 2 only.

Do NOT work on any other part of this test until you are told to do so.
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  How much money is $\frac{3}{4}$ of a dollar?

A  $0.25  
B  $0.50  
C  $0.75  
D  $1.25

41  Three friends bought one package of paper that cost $1.50. Each friend gave the same amount to pay for the paper. How much did each friend give?

A  $0.25  
B  $0.50  
C  $0.75  
D  $1.00

42  How much money is 3 half dollars plus 2 quarters?

A  $0.50  
B  $1.00  
C  $1.50  
D  $2.00
43 Which of these units would be used to measure the length of a room?

A  gallon
B  pound
C  hour
D  foot

44 Which unit would be used to weigh fruit at the grocery store?

A  gallon
B  pound
C  liter
D  meter

45 Which of these units would NOT be used to measure the length of a playground?

A  grams
B  feet
C  meters
D  yards
46. Which of these measures would be close to the length of a new pencil?
   A  7 inches
   B  7 meters
   C  7 feet
   D  7 kilometers

47. Which length is the longest?
   A  7 m, 55 cm
   B  7 m, 80 cm
   C  6 m, 92 cm
   D  6 m, 31 cm

48. Which amount of time is the longest?
   A  2 hours, 26 minutes
   B  1 hour, 14 minutes
   C  1 hour, 45 minutes
   D  2 hours, 30 minutes
49 The floor of Alberto’s rabbit cage is a rectangular area that is 30 inches long and 17 inches wide. What is the perimeter of the floor of the rabbit cage?

A 34 inches  
B 47 inches  
C 60 inches  
D 94 inches

50 The floor of Carol’s bedroom is a square area that is 9 feet on each side. What is the perimeter of the floor of her bedroom?

A 18 feet  
B 36 feet  
C 81 feet  
D 90 feet

51 What is the perimeter of a square that measures 10 inches on each side?

A 20 inches  
B 30 inches  
C 40 inches  
D 100 inches
52 Which pair of figures can be made by cutting up the triangle below?

A

B

C

D
53 Which new figure can be formed by putting these two triangles together?

A

B

C

D
54 Which figure can be formed from the two triangles below?

A

B

C

D
This table shows some magazine subscription prices for 1, 2, and 3 years.

<table>
<thead>
<tr>
<th>Number of Years</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$35.00</td>
</tr>
<tr>
<td>2</td>
<td>$70.00</td>
</tr>
<tr>
<td>3</td>
<td>$105.00</td>
</tr>
</tbody>
</table>

If the price per year stays the same, what is the subscription price for 4 years?

A  $135.00
B  $140.00
C  $175.00
D  $210.00
During “Conservation Week” each student brought in things to be recycled. The results for the week are shown below. What should be the title for this graph?

Title: ____________________________

A  Saving Energy
B  Newspapers Read
C  Recycled Items
D  Plastic or Paper
57 Roger took a survey of the shoe sizes of the students in his grade. The results of the survey are graphed below.

Exactly how many students participated in Roger’s survey?

A  46
B  44
C  42
D  40
Allison is buying pet fish for her brothers and sister. Allison has 3 brothers and 1 sister. She wants to buy 3 fish for each.

**Part A** Explain how Allison can determine the number of fish she needs to buy.

**Part B** Write a number sentence that can be used to determine the number of fish Allison needs to buy.

**Part C** How many fish does Allison need to buy?

**ANSWER THIS ITEM IN YOUR ANSWER DOCUMENT.**

**SHOW ALL YOUR WORK IN YOUR ANSWER DOCUMENT.**
59 This graph shows how a group of students voted on what type of tree they would like to plant in front of the school for Arbor Day.

![Arbor Day Planting Graph]

Which statement correctly represents the outcome of the voting?

A  Pine trees and oak trees received the same number of votes.

B  Maple trees received the greatest number of votes.

C  Oak trees received the least number of votes.

D  Walnut trees received more votes than pine trees and oak trees combined.
60 What is the distance from V to W?

A 5 units
B 6 units
C 7 units
D 8 units

61 Which face is parallel to the shaded front face in this figure?

A back
B top
C bottom
D side
62 Which figure below is a hexagon?

A  

B  

C  

D  

63 What is the top view of the figure?

A  

B  

C  

D  

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The city hall in Smithville is 25 feet, 4 inches tall. Workers put a tower on the roof of city hall. The tower is 11 feet, 7 inches tall. How high off the ground is the top of the tower?

A  14 feet, 3 inches
B  14 feet, 11 inches
C  36 feet, 3 inches
D  36 feet, 11 inches
65 Jamie and Rosa are looking at two rectangular pieces of poster board. What is the difference in the areas of the two posters?

- A 18 square units
- B 22 square units
- C 24 square units
- D 42 square units

66 What is the area of the figure below?

- A 18 square units
- B 20 square units
- C 22 square units
- D 24 square units
67 Which units can be used to measure the area of a sheet of computer paper?

A  liters
B  square inches
C  meters
D  centimeters

68 Which coin is closest in area to 1 square inch?

A  
B  
C  
D  
69 Three girls each have \( \frac{1}{2} \) yard of ribbon. Which equation shows how many yards of ribbon they have altogether?

A \( \frac{3}{2} + \frac{3}{2} + \frac{3}{2} = \frac{9}{2} \)

B \( \frac{1}{2} + \frac{1}{2} + \frac{1}{2} = \frac{3}{2} \)

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

D \( \frac{1}{2} + \frac{1}{2} + \frac{1}{2} = \frac{3}{6} \)

70 What is the rule for the pattern in the following diagram?

A Multiply the number of circles by 3.

B Increase the number of circles by 2.

C Increase the number of circles by 3.

D Increase the number of circles by 2 and then by 3.
71 Which of the drawings shows that $\frac{1}{4} = \frac{2}{8}$?

A

B

C

D
72 Bev cuts her candy bar into 5 equal pieces. She eats 4 of them. Which equation shows the part she eats?

A \[ \frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5} = \frac{4}{5} \]

B \[ \frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} = \frac{4}{4} \]

C \[ \frac{4}{5} + \frac{4}{5} + \frac{4}{5} + \frac{4}{5} = \frac{16}{5} \]

D \[ \frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5} = \frac{4}{20} \]
73 Which number sentence is shown on this number line?

![Number line with points J and K]

A \[ \frac{1}{4} + \frac{1}{4} = \frac{2}{4} \]

B \[ \frac{1}{4} + \frac{2}{4} = \frac{3}{4} \]

C \[ \frac{1}{4} + \frac{3}{4} = \frac{4}{4} \]

D \[ \frac{2}{4} + \frac{2}{4} = \frac{4}{4} \]

74 Which sides of this figure seem to be perpendicular?

![Geometric figure with perpendicular sides]

A b and d
B a and d
C a and c
D b and c
75 Sally rode for 3 hours and 48 minutes in the car. She spent 1 hour and 33 minutes playing travel games and the rest of the time reading. How much time did Sally spend reading while in the car?

A 1 hour 5 minutes  
B 2 hours 15 minutes  
C 2 hours 25 minutes  
D 4 hours 15 minutes

76 What is the area of the left half of the card where you can write a note?

A 12 square inches  
B 14 square inches  
C 20 square inches  
D 24 square inches
77 Which fraction is shown by point P?

\[ \text{A} \quad \frac{1}{8} \]

\[ \text{B} \quad \frac{2}{8} \]

\[ \text{C} \quad \frac{4}{8} \]

\[ \text{D} \quad \frac{6}{8} \]

78 Each student in Mrs. Gray’s class brought 3 pencils to school. The students brought 75 pencils in all. Which number should be in the box to show how many students are in the class?

\[ 3 \times \square = 75 \]

\[ \text{A} \quad 20 \]

\[ \text{B} \quad 25 \]

\[ \text{C} \quad 30 \]

\[ \text{D} \quad 225 \]
79 Marco has 16 slices of apple to share equally among himself and 2 friends. He knows that $16 \div 3 = 5 \text{ R}1$. What does R1 represent?

A the number of apple slices left over after each person gets an equal amount

B the greatest number of apple slices Marco can give to each person

C the number of people to whom Marco gives apple slices

D the total number of apple slices Marco has to share
### Scoring Key: Part 1

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<thead>
<tr>
<th>Item No.</th>
<th>Correct Answer</th>
<th>GLCE</th>
<th>Type</th>
<th>Description</th>
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<td>N.ME.03.01</td>
<td>Core-NC</td>
<td>Read and write numbers to 10,000</td>
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<td>B</td>
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<td>Core-NC</td>
<td>Read and write numbers to 10,000</td>
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<td>3</td>
<td>A</td>
<td>N.ME.03.01</td>
<td>Core-NC</td>
<td>Read and write numbers to 10,000</td>
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<td>Find products to 10 X 10 and related quotients</td>
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<td>18</td>
<td>A</td>
<td>N.FL.03.11</td>
<td>Core-NC</td>
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NC=Non Calculator
### Scoring Key: Part 2

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<td>Core</td>
<td>Recognize multiplication and division situations</td>
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<td>B</td>
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<td>Recognize multiplication and division situations</td>
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<td>N.ME.03.16</td>
<td>Core</td>
<td>Understand meaning &amp; terminology of fractions</td>
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<td>A</td>
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<td>Core</td>
<td>Understand meaning &amp; terminology of fractions</td>
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<td>Measure in mixed units within measurement system</td>
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<td>27</td>
<td>B</td>
<td>M.UN.03.02</td>
<td>Core</td>
<td>Measure in mixed units within measurement system</td>
</tr>
<tr>
<td>28</td>
<td>D</td>
<td>M.UN.03.04</td>
<td>Core</td>
<td>Know benchmark temperatures &amp; compare cooler, warmer</td>
</tr>
<tr>
<td>29</td>
<td>A</td>
<td>M.UN.03.04</td>
<td>Core</td>
<td>Know benchmark temperatures &amp; compare cooler, warmer</td>
</tr>
<tr>
<td>30</td>
<td>C</td>
<td>M.UN.03.04</td>
<td>Core</td>
<td>Know benchmark temperatures &amp; compare cooler, warmer</td>
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<tr>
<td>31</td>
<td>A</td>
<td>M.PS.03.11</td>
<td>Core</td>
<td>Add and subtract money in dollars and cents</td>
</tr>
<tr>
<td>32</td>
<td>D</td>
<td>M.PS.03.11</td>
<td>Core</td>
<td>Add and subtract money in dollars and cents</td>
</tr>
<tr>
<td>33</td>
<td>C</td>
<td>M.PS.03.11</td>
<td>Core</td>
<td>Add and subtract money in dollars and cents</td>
</tr>
<tr>
<td>34</td>
<td>C</td>
<td>G.GS.03.06</td>
<td>Core</td>
<td>Identify, describe, classify familiar 3-D solids</td>
</tr>
<tr>
<td>35</td>
<td>D</td>
<td>G.GS.03.06</td>
<td>Core</td>
<td>Identify, describe, classify familiar 3-D solids</td>
</tr>
<tr>
<td>36</td>
<td>D</td>
<td>G.GS.03.06</td>
<td>Core</td>
<td>Identify, describe, classify familiar 3-D solids</td>
</tr>
<tr>
<td>37</td>
<td>C</td>
<td>D.RE.03.02</td>
<td>Core</td>
<td>Read scales on axes. Identify the max, min, range</td>
</tr>
<tr>
<td>38</td>
<td>A</td>
<td>D.RE.03.02</td>
<td>Core</td>
<td>Read scales on axes. Identify the max, min, range</td>
</tr>
<tr>
<td>39</td>
<td>B</td>
<td>D.RE.03.02</td>
<td>Core</td>
<td>Read scales on axes. Identify the max, min, range</td>
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### 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.ME.03.21</td>
<td>Core</td>
<td>Understand meaning of 0.50 &amp; 0.25 related to money</td>
</tr>
<tr>
<td>41</td>
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<td>N.ME.03.21</td>
<td>Core</td>
<td>Understand meaning of 0.50 &amp; 0.25 related to money</td>
</tr>
<tr>
<td>42</td>
<td>D</td>
<td>N.ME.03.21</td>
<td>Core</td>
<td>Understand meaning of 0.50 &amp; 0.25 related to money</td>
</tr>
<tr>
<td>43</td>
<td>D</td>
<td>M.UN.03.01</td>
<td>Core</td>
<td>Use common measures of length, weight, time</td>
</tr>
<tr>
<td>44</td>
<td>B</td>
<td>M.UN.03.01</td>
<td>Core</td>
<td>Use common measures of length, weight, time</td>
</tr>
<tr>
<td>45</td>
<td>A</td>
<td>M.UN.03.01</td>
<td>Core</td>
<td>Use common measures of length, weight, time</td>
</tr>
<tr>
<td>46</td>
<td>A</td>
<td>M.UN.03.03</td>
<td>Core</td>
<td>Use relationships between sizes of standard units</td>
</tr>
<tr>
<td>47</td>
<td>B</td>
<td>M.UN.03.03</td>
<td>Core</td>
<td>Use relationships between sizes of standard units</td>
</tr>
<tr>
<td>48</td>
<td>D</td>
<td>M.UN.03.03</td>
<td>Core</td>
<td>Use relationships between sizes of standard units</td>
</tr>
<tr>
<td>49</td>
<td>D</td>
<td>M.UN.03.05</td>
<td>Core</td>
<td>Calculate area and perimeter of square &amp; rectangle</td>
</tr>
<tr>
<td>50</td>
<td>B</td>
<td>M.UN.03.05</td>
<td>Core</td>
<td>Calculate area and perimeter of square &amp; rectangle</td>
</tr>
<tr>
<td>51</td>
<td>C</td>
<td>M.UN.03.05</td>
<td>Core</td>
<td>Calculate area and perimeter of square &amp; rectangle</td>
</tr>
<tr>
<td>52</td>
<td>D</td>
<td>G.SR.03.05</td>
<td>Core</td>
<td>Compose and decompose triangles and rectangles</td>
</tr>
<tr>
<td>53</td>
<td>B</td>
<td>G.SR.03.05</td>
<td>Core</td>
<td>Compose and decompose triangles and rectangles</td>
</tr>
<tr>
<td>54</td>
<td>A</td>
<td>G.SR.03.05</td>
<td>Core</td>
<td>Compose and decompose triangles and rectangles</td>
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<tr>
<td>55</td>
<td>B</td>
<td>D.RE.03.03</td>
<td>Core</td>
<td>Solve problems using bar graphs, compare graphs</td>
</tr>
<tr>
<td>56</td>
<td>C</td>
<td>D.RE.03.03</td>
<td>Core</td>
<td>Solve problems using bar graphs, compare graphs</td>
</tr>
<tr>
<td>57</td>
<td>A</td>
<td>D.RE.03.03</td>
<td>Core</td>
<td>Solve problems using bar graphs, compare graphs</td>
</tr>
<tr>
<td>58</td>
<td>E</td>
<td>N.MR.03.15</td>
<td>Core-CR</td>
<td>Identify operation for problem and solve</td>
</tr>
<tr>
<td>59</td>
<td>B</td>
<td>D.RE.03.01</td>
<td>Extended</td>
<td>Read &amp; interpret horizontal and vertical bar graphs</td>
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<tr>
<td>60</td>
<td>B</td>
<td>G.GS.03.01</td>
<td>Extended</td>
<td>Identify points, line segments, lines and distance</td>
</tr>
<tr>
<td>61</td>
<td>A</td>
<td>G.GS.03.03</td>
<td>Extended</td>
<td>Identify parallel faces of rectangular prisms</td>
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</tbody>
</table>
### Mathematics – Grade 4

**Scoring Key: Part 3 (continued)**

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Correct Answer</th>
<th>GLCE</th>
<th>Type</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>62</td>
<td>A</td>
<td>G.GS.03.04</td>
<td>Extended</td>
<td>Identify, describe, compare, classify 2-D shapes</td>
</tr>
<tr>
<td>63</td>
<td>B</td>
<td>G.SR.03.07</td>
<td>Extended</td>
<td>Show front/top/side views of solids built w/ cubes</td>
</tr>
<tr>
<td>64</td>
<td>D</td>
<td>M.PS.03.12</td>
<td>Extended</td>
<td>Solve problems involving money, length and time</td>
</tr>
<tr>
<td>65</td>
<td>A</td>
<td>M.PS.03.13</td>
<td>Extended</td>
<td>Solve problems about perimeter/area of rectangles</td>
</tr>
<tr>
<td>66</td>
<td>D</td>
<td>M.UN.03.06</td>
<td>Extended</td>
<td>Find area of region by covering &amp; counting sq. units</td>
</tr>
<tr>
<td>67</td>
<td>B</td>
<td>M.UN.03.07</td>
<td>Extended</td>
<td>Distinguish between units of length and area in cont</td>
</tr>
<tr>
<td>68</td>
<td>C</td>
<td>M.UN.03.08</td>
<td>Extended</td>
<td>Compare relative sizes of square inch &amp; square cm</td>
</tr>
<tr>
<td>69</td>
<td>B</td>
<td>N.ME.03.19</td>
<td>Extended</td>
<td>Understand fraction as sum of unit fractions</td>
</tr>
<tr>
<td>70</td>
<td>B</td>
<td>N.ME.03.05</td>
<td>Extended-NC</td>
<td>Know that even numbers end in 0, 2, 4, 6 or 8</td>
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<tr>
<td>71</td>
<td>D</td>
<td>N.ME.03.17</td>
<td>Extended</td>
<td>Recognize, name and use equivalent fractions</td>
</tr>
<tr>
<td>72</td>
<td>A</td>
<td>N.ME.03.19</td>
<td>Extended</td>
<td>Understand fraction as sum of unit fractions</td>
</tr>
<tr>
<td>73</td>
<td>B</td>
<td>N.MR.03.20</td>
<td>Extended</td>
<td>Model +, - of fractions on number line</td>
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<tr>
<td>74</td>
<td>B</td>
<td>G.GS.03.02</td>
<td>Future</td>
<td>Identify perpendicular lines and parallel lines</td>
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<tr>
<td>75</td>
<td>B</td>
<td>M.PS.03.10</td>
<td>Future</td>
<td>Add and subtract lengths, weights and times</td>
</tr>
<tr>
<td>76</td>
<td>A</td>
<td>M.TE.03.09</td>
<td>Future</td>
<td>Estimate perimeter &amp; area of square &amp; rectangle</td>
</tr>
<tr>
<td>77</td>
<td>B</td>
<td>N.ME.03.18</td>
<td>Future</td>
<td>Place &amp; compare fractions on number line</td>
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<tr>
<td>78</td>
<td>B</td>
<td>N.MR.03.12</td>
<td>Future</td>
<td>Find solutions to open sentences that use x and ÷</td>
</tr>
<tr>
<td>79</td>
<td>A</td>
<td>N.MR.03.14</td>
<td>Future</td>
<td>Solve division problems involving remainders</td>
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</table>