Directions:

On the following pages of your test booklet are questions for the Grade 5 Practice Test, a practice opportunity for the Nebraska State Accountability–Mathematics (NeSA–M).

Multiple choice questions will ask you to select an answer from among four choices. For some questions, there may be two parts, Part A and Part B, where each part has a multiple choice question that will ask you to select an answer from among four choices. Multiple select questions will ask you to select multiple correct answers from among five or six answer choices. These types of questions may be found in your test booklet.

For all questions:

- Read each question carefully and choose the best answer.
- You may use scratch paper to solve the problems.
- You may not use a calculator on this test.
- Be sure to answer ALL the questions.

For multiple choice questions, only one of the answers provided is the correct response. For multiple select questions, more than one of the answers provided may be a correct response.
1. What is $\frac{1}{4} \div 3$?
   
   A. $\frac{1}{12}$
   
   B. $\frac{3}{4}$
   
   C. $\frac{4}{3}$
   
   D. 12

2. Billy jumps $4$ yards. What is the length of his jump, in inches?
   
   A. 40
   
   B. 48
   
   C. 124
   
   D. 144

3. What is 9,887 rounded to the nearest thousand?
   
   A. 9,000
   
   B. 9,800
   
   C. 9,900
   
   D. 10,000
4. Use the picture below to answer the question.

How many edges does the right rectangular prism have?
A. 6
B. 8
C. 10
D. 12

5. Which set of steps shows the sum of $\frac{2}{3} + \frac{3}{4}$ in simplest form?
A. $\frac{2}{3} + \frac{3}{4} \rightarrow \frac{8}{12} + \frac{9}{12} \rightarrow \frac{17}{12} \rightarrow 1 \frac{5}{12}$
B. $\frac{2}{3} + \frac{3}{4} \rightarrow \frac{5}{7} + \frac{5}{7} \rightarrow \frac{10}{7} \rightarrow 1 \frac{3}{7}$
C. $\frac{2}{3} + \frac{3}{4} \rightarrow \frac{6}{12} + \frac{12}{12} \rightarrow \frac{18}{12} \rightarrow 1 \frac{1}{2}$
D. $\frac{2}{3} + \frac{3}{4} \rightarrow \frac{8}{12} + \frac{9}{12} \rightarrow \frac{17}{12} \rightarrow 1 \frac{7}{12}$

6. Which is true?
A. $4.09 > 4.50$
B. $2.31 > 2.18$
C. $5.23 < 5.14$
D. $6.80 < 6.29$
7. Use the graph below to answer the question.

![Animals at the Zoo graph]

Which conclusion is true?
A. There are six more giraffes than penguins.
B. There are two more elephants than giraffes.
C. There are three more penguins than sharks.
D. There are eight more penguins than elephants.

8. What is $4,376 \div 36$?
A. 121
B. 121R20
C. 122
D. 122R16
9. Which figure is labeled correctly?

A. prism
B. sphere
C. cone
D. cube

10. Use the graphic below to answer the question.

What is the sum of the fractions represented by the blocks?

A. 0.12
B. 1.155
C. 1.2
D. 1.65
11. Which number does $10^5$ represent?
   
   A. 50
   B. 500
   C. 10,000
   D. 100,000

12. A recipe calls for $\frac{1}{4}$ pound of nuts, $\frac{1}{8}$ pound of candy pieces, and $\frac{1}{3}$ pound of dried fruit. What is the total weight, in pounds, of nuts, candy pieces, and dried fruit the recipe calls for?
   
   A. $\frac{1}{15}$
   B. $\frac{3}{15}$
   C. $\frac{17}{24}$
   D. $\frac{17}{8}$

13. What is the product of $18 \times 24$?
   
   A. 108
   B. 128
   C. 432
   D. 632
14. What is the standard form of forty-five and nine tenths?
   A. 45.009
   B. 45.09
   C. 45.9
   D. 45.910

15. Use the coordinate grid below to answer the question.

   ![Coordinate Grid]

   What are the coordinates of point P?
   A. (3, 5)
   B. (5, 3)
   C. (5, 4)
   D. (6, 3)

16. When solving the expression $4 + 6 \div 2 \times 5 - 3$, which operation is performed first?
   A. $4 + 6$
   B. $6 \div 2$
   C. $2 \times 5$
   D. $5 - 3$
17. Which shows \( \frac{3}{4} \) as a decimal?

A. 0.25  
B. 0.34  
C. 0.43  
D. 0.75

18. Use the figure below to answer the question.

What is the volume of the figure?

A. 11 units\(^3\)  
B. 27 units\(^3\)  
C. 34 units\(^3\)  
D. 36 units\(^3\)

19. What is 170 \times 10?  

A. 17  
B. 170  
C. 1,700  
D. 17,000
20. Which set of ordered pairs could be generated by the rule \( y = 7x \)?

A. \((0, 7), (1, 14), (3, 28)\)
B. \((1, 7), (2, 14), (4, 28)\)
C. \((7, 0), (14, 1), (28, 3)\)
D. \((7, 1), (14, 2), (28, 4)\)

21. This question has two parts. Answer part A, and then answer part B.

**Part A**

Use the equation below to answer part A.

\[14 \times 10^2 = 140,000\]

What is the missing number that makes the equation true?

A. 2
B. 4
C. 6
D. 8

**Part B**

Use the equation below to answer part B.

\[4,800,000 \div 10^2 = 480\]

What is the missing number that makes the equation true?

A. 4
B. 5
C. 6
D. 7
22. Use the graph below to answer the question.

Select all of the statements that are true. Select all.

A. Point B is located at the origin.
B. Point A is located only on the $x$-axis.
C. Point C is located only on the $y$-axis.
D. Point A is located on both the $x$-axis and $y$-axis.
E. Point B is not located on either the $x$-axis or $y$-axis.
Use the bar graph below to answer the question.

The bar graph represents the numbers of students in a class wearing black, green, and white shirts. Select all of the statements that are true. Select all.

A. There is a total of 6 students in the class wearing green shirts.
B. There is a total of 10 students in the class wearing white shirts.
C. There is a total of 25 students in the class wearing black, green, or white shirts.
D. There is a total of 15 students in the class wearing either a black shirt or a green shirt.
E. There is a total of 19 students in the class wearing either a black shirt or a white shirt.
### Conversions – Length

<table>
<thead>
<tr>
<th>Standard Units</th>
<th>Metric Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 foot (ft) = 12 inches (in.)</td>
<td>1 centimeter (cm) = 10 millimeters (mm)</td>
</tr>
<tr>
<td>1 yard (yd) = 3 feet (ft) = 36 inches (in.)</td>
<td>1 meter (m) = 100 centimeters (cm)</td>
</tr>
<tr>
<td>1 mile (mi) = 1,760 yards (yd) = 5,280 feet (ft)</td>
<td>1 meter (m) = 1,000 millimeters (mm)</td>
</tr>
<tr>
<td></td>
<td>1 kilometer (km) = 1,000 meters (m)</td>
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</tbody>
</table>

### Conversions – Volume

<table>
<thead>
<tr>
<th>Standard Units</th>
<th>Metric Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 cup = 8 fluid ounces (fl oz)</td>
<td>1 liter (l) = 1,000 milliliters (ml)</td>
</tr>
<tr>
<td>1 pint (pt) = 2 cups</td>
<td>1 liter (l) = 1,000 cubic centimeters (cu. cm)</td>
</tr>
<tr>
<td>1 quart (qt) = 2 pints (pt)</td>
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</tr>
<tr>
<td>1 gallon (gal.) = 4 quarts (qt)</td>
<td></td>
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</tbody>
</table>

### Conversions – Weight/Mass

<table>
<thead>
<tr>
<th>Standard Units</th>
<th>Metric Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 pound (lb) = 16 ounces (oz)</td>
<td>1 gram (g) = 1,000 milligrams (mg)</td>
</tr>
<tr>
<td>1 ton = 2,000 pounds (lb)</td>
<td>1 kilogram (kg) = 1,000 grams (g)</td>
</tr>
</tbody>
</table>
Grade 5  
Mathematics Practice Test  
Answer Key

<table>
<thead>
<tr>
<th>Sequence</th>
<th>Key</th>
<th>Points</th>
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<tbody>
<tr>
<td>1</td>
<td>A</td>
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<tr>
<td>2</td>
<td>D</td>
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<tr>
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<td>D</td>
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<tr>
<td>4</td>
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<tr>
<td>5</td>
<td>A</td>
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<tr>
<td>6</td>
<td>B</td>
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<td>7</td>
<td>C</td>
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<td>8</td>
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<td>9</td>
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<td>20</td>
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<tr>
<td>21</td>
<td>Part A: B</td>
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<tr>
<td></td>
<td>Part B: A</td>
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<tr>
<td>22</td>
<td>A, B, C</td>
<td>2</td>
</tr>
<tr>
<td>23</td>
<td>B, C, D</td>
<td>2</td>
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</tbody>
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Grade 5
Mathematics Practice Test