Elementary Math
2013

Elementary Math
Assessment Sampler
Dear Teachers:

Enclosed are samples of questions similar to those students will experience in the Elementary Math Assessment. This Sampler is not intended as a review – it is to familiarize students with format. These questions may be used in your classroom to help students feel comfortable with the types of assessment formats they will experience. The Sampler can also be used to discuss effective assessment strategies with your students.

Assessments Strategies to Discuss With Students:

- Read each question carefully. You may have to read it more than once to understand what to do.
- Try every question even if you are not sure how to do it.
- Pictures, graphs, and charts give you information. Be sure to look at them carefully and think about the information in them.
- You may draw your own pictures to help you understand the question.
- For multiple choice questions, be sure to read all possible answers so that you can make the best choice.
- Multiple choice answers will be recorded on a bubble sheet. Students must do their work and record their answers in Student Booklet and then record the answer on the Bubble Sheet. (There is a sample of a Bubble Sheet located at the end of the Assessment Sampler.)
- For fill-in-the-blank questions, space is provided to work out answers. Be sure to put your answer in the blank.

Math Facts

This Sampler does not include examples of Math Facts questions; however, a recording sheet similar to the one students will use in the Elementary Mathematics Assessment is provided at the front of the Sampler. This may be used for practice.

For the Math Facts section, you will read the question while showing it on an overhead/LCD/SMART board. Students are not allowed to write down the question or any other marks to help solve the question. The Math Facts section is assessing the students’ recall of multiplication and division Math Facts within three seconds.

Approved Adaptations

If a student requires adaptations to write the Elementary Math Assessment, please ensure that appropriate documentation is attached to the Student Booklet. The following adaptations are approved for the Elementary Math Assessment:

- Additional Time
• Verbatim Scribing
• Verbatim Reading
• Alternate Setting
• Assistive Technology
• Personal FM
• Foreign Language Dictionary

**Permitted Materials**

Students will be permitted to use the following materials:

• Protractor
• Metric Ruler
• Tracing Paper

*Note:* Calculators, multiplication charts, and wall charts are **NOT** permitted for the Elementary Math Assessment.
Farmer Joe has an 11m by 12m yard that needs to be planted with grass seed. If 1 bag of grass seed covers 6m² of yard, how many bags will Farmer Joe need?

A  22 bags  
B  29 bags  
C  46 bags  
D  132 bags
Using the table of values, write an expression to represent the input/output relationship.

<table>
<thead>
<tr>
<th>Input (n)</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>6</td>
<td>11</td>
</tr>
</tbody>
</table>

Answer: ______________________
What is the measure of missing angle $x$?

\[ \begin{array}{c}
\text{A} \quad 35^\circ \\
\text{B} \quad 45^\circ \\
\text{C} \quad 55^\circ \\
\text{D} \quad 90^\circ \\
\end{array} \]
1. Translate $\triangle DEF$ 3 squares right and 2 squares down. Label this triangle $D'E'F'$

2. Rotate $\triangle D'E'F'$ clockwise 90° about $F'$ and draw the rotation image. Label the vertices $D''E''$. 
A grade 6 class planted a sunflower and recorded its height in the graph below.

1. During which 2-week period did the sunflower grow the most?
   A. Weeks 0-2
   B. Weeks 2-4
   C. Weeks 4-6
   D. Weeks 6-8
Heidi is making milkshakes. The recipe calls for 2 scoops of chocolate ice cream and 1 cup of milk.

If she uses 8 scoops of ice cream, how much milk will she need?

A. 4 cups  
B. 6 cups  
C. 8 cups  
D. 16 cups
Sam went to a hockey game. There were fifty thousand two hundred eighty-one spectators.

Which standard number represents how many spectators were at the game?

A. 5 281  
B. 50 281  
C. 52 081  
D. 500 281
Chose the symbol to make each number sentence true.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>80%</td>
<td>&lt;</td>
<td>=</td>
<td>&gt;</td>
</tr>
<tr>
<td>2.</td>
<td>0.6</td>
<td>&lt;</td>
<td>=</td>
<td>&gt;</td>
</tr>
<tr>
<td>3.</td>
<td>$\frac{22}{25}$</td>
<td>&lt;</td>
<td>=</td>
<td>&gt;</td>
</tr>
<tr>
<td>4.</td>
<td>25%</td>
<td>&lt;</td>
<td>=</td>
<td>&gt;</td>
</tr>
</tbody>
</table>
Look at the pattern below.

Figure 1  Figure 2  Figure 3  Figure 4

If the pattern continues, how many dots will be in Figure 11?

A  12
B  14
C  24
D  44
Which rectangular prism has a volume of 10 cm³?
A paper bag contains 4 green tiles, 8 yellow tiles and 1 blue tile. Jamie draws a tile from the bag without looking. What is the theoretical probability of choosing a green tile?

(A) \( \frac{1}{13} \)

(B) \( \frac{4}{13} \)

(C) \( \frac{8}{13} \)

(D) \( \frac{9}{13} \)
Noah is training to run long distances. He runs a longer distance each day. He records the distance on a chart.

<table>
<thead>
<tr>
<th>Day</th>
<th>Distance (km)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>1.0</td>
</tr>
<tr>
<td>Tuesday</td>
<td>1.5</td>
</tr>
<tr>
<td>Wednesday</td>
<td>2.0</td>
</tr>
<tr>
<td>Thursday</td>
<td>2.5</td>
</tr>
<tr>
<td>Friday</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Draw and label a series of points graph to show the distance Noah runs each day.
Write the missing integer in each box.

-15 0 +15

a) b) c) d)
Which diagram represents the fraction $\frac{60}{100}$? 

A  

B  

C  

D
Select the graph that best represents the data shown.

A. Molly weighs her new puppy at the end of each month for 8 months.

<table>
<thead>
<tr>
<th>Month</th>
<th>Mass (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>8</td>
<td>10</td>
</tr>
</tbody>
</table>

B. Frankie counted the amount of ducks in the pond each day for a week.

<table>
<thead>
<tr>
<th>Day</th>
<th>Number of Ducks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>7</td>
<td>4</td>
</tr>
</tbody>
</table>

C. Tina counted the number of juice boxes in the garbage each day.

<table>
<thead>
<tr>
<th>Day</th>
<th>Number of Juice Boxes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mon.</td>
<td>10</td>
</tr>
<tr>
<td>Tues.</td>
<td>8</td>
</tr>
<tr>
<td>Wed.</td>
<td>3</td>
</tr>
<tr>
<td>Thurs.</td>
<td>6</td>
</tr>
<tr>
<td>Fri.</td>
<td>4</td>
</tr>
</tbody>
</table>

D. Freddy had a dog and a cat. He measured how much time his dog slept each day for five days.

<table>
<thead>
<tr>
<th>Day</th>
<th>Minutes Slept</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>120</td>
</tr>
<tr>
<td>2</td>
<td>100</td>
</tr>
<tr>
<td>3</td>
<td>115</td>
</tr>
<tr>
<td>4</td>
<td>125</td>
</tr>
<tr>
<td>5</td>
<td>100</td>
</tr>
</tbody>
</table>
The local radio station is holding a phone-in contest. Every fourth caller wins a free movie pass. Every sixth caller wins a fast food coupon. Which caller is the first to win both prizes?

A. 4th
B. 10th
C. 12th
D. 24th
Sophie cut a ribbon into 6 equal lengths. Each piece was 0.24m long. How long was the ribbon before it was cut?

A. 0.04 m
B. 0.4 m
C. 1.22 m
D. 1.44 m
Estimate the quotient $26.83 \div 4$.

A) 0.6
B) 6
C) 60
D) 600
Answer Key

Question 1: A – 22 bags

Question 2: 2n – 1 (variable may differ)

Question 3: A – 35

Question 4:

1. Translate Δ DEF 3 squares right and 2 squares down. Label this triangle D'E'F'.

2. Rotate Δ D'E'F' clockwise 90° about F' and draw the rotation image. Label the vertices D''E''.

Note: To receive a correct answer on this question, students need to have the prime marks on the translated image and double prime marks on the rotated image.
Question 5: D – Weeks 6-8

Question 6: A – 4 cups

Question 7: B – 50 281

Question 8: 1. >
   2. >
   3. =
   4. <

Question 9: C – 24

Question 10: C

Question 11: B

Question 12:

To receive full credit for this question, the graph must include the following:

A. Suitable title.
B. Labeled Axis – for this graph that would include the numbering and listing the days of the week.
C. Labeled categories – for this graph that would include Distance (Km) units must be included and Day.
D. Clear scale – for this graph that would mean the distance would go up in equal increments.
E. Plot points correctly and clearly.
Question 13:  A) -12  
               B) -4  
               C) 2 or +2  
               D) 9 or +9

Question 14:  B

Question 15:  B

Question 16:  C – 12\text{th}

Question 17:  D – 1.44m

Question 18:  B - 6