Mathematics Grade 7
Classroom Assessment Based on Standards (MMP 08/06)

MPS Learning Target – Number Operations and Relationships
- Represent, rename, compare, and identify equivalent forms of fractions, decimals, and percents using place value and number theory concepts.
- Estimate and justify solutions to problems with and without context involving whole numbers, integers, and rational numbers, including applications of proportional reasoning.

1.) Find the mystery number
   - It is a composite number.
   - It is a multiple of 3, 4, 6, and 8.
   - It is less than 40.
   - The sum of its digits is 6.

   The number is ______________

2.) What number is one hundred million seventy-two more than one million one thousand one? Write the number in standard form and in words.

   Standard Form:___________________________
   Words:_______________________________________________________
   __________________________________________________________________

3a.) Estimate answer for the following question:

   56.718 + 23.09 + 8.324 = ?     Estimate: _____________

3b) Solve the problem and explain your answer/thinking:
4.) Jill and 3 friends ate dinner at a restaurant. The bill was $67. In addition, they left a $13 tip. Approximately what percent of the bill did they leave as a tip?

Tip percentage _________________

Total amount of money left _______________

5) The school cafeteria has French fries every 5 days, cheese burgers every 8 days and chewy brownies every 12 days. If all three are being sold today, how many days will it be before they are all being sold on the same day again?

Answer _______________________

Explain your answer and show your work.
6.) You are going to the store to buy the newest Air Jordan’s with $200.00 to spend. You want to find the best deal. Check out these two stores!

<table>
<thead>
<tr>
<th>Diane’s Fancy Footwear</th>
<th>MaryBeth’s Discount Deals</th>
</tr>
</thead>
<tbody>
<tr>
<td>The original price is $150.00.</td>
<td>The original price is $120.00</td>
</tr>
<tr>
<td>The store offers a discount of 30%</td>
<td>The store offers a discount of 20%</td>
</tr>
<tr>
<td>Students are offered an additional 10% off.</td>
<td></td>
</tr>
</tbody>
</table>

Both stores have a Wisconsin sales tax of 5.5%.

6a.) After considering the discounts and sales tax at each store, what will the final cost of the shoes be at each store?

At Diane’s ____________________  At MaryBeth’s ____________________

Show your work.

6b.) At which store will you buy your shoes? Explain why.

__________________________________________________________________________

__________________________________________________________________________

6c.) What fraction of your original $200.00 will you have left after buying the shoes?_________

Show your work.
7a.) Write your final answer using standard notation where necessary.

Express 200 in prime factorization.  
Express 90 in prime factorization.

7b.) List the greatest common factor (divisor) GCD of 200 and 90

7c.) List the least common multiple LCM of 200 and 90

7d.) Explain how you know your answers in part b and c are correct:

8a.) Circle the whole number that the expression $122.099 - 87.8$ is closest to.

- 32
- 34
- 30
- 35

8b.) Explain your reasoning.
9a.) Represent the data in a pie chart.

\[
\frac{1}{3} \text{ sport} \\
\frac{3}{8} \text{ music} \\
\frac{1}{6} \text{ hobby} \\
\frac{1}{8} \text{ math club}
\]

9b.) Of the music group 60% play in the band, 40% play in the orchestra. What fraction plays in the band?

Answer ________________________

Show how you solved the problem.

Explain your answer.
10a). Write a story problem for the $2 \frac{1}{2} \div \frac{3}{4} = [?]$

10b). Draw a picture (model) to show how you would solve the problem.

10c). Write the solution as an equation: _____________________________________________