June 12, 2019

Dear Parents and Guardians of Students Entering Fifth Grade,

The summer break will soon be upon us! During the summer months, we encourage our students to continue to practice essential math skills, such as basic multiplication facts and core foundational skills. Continued practice helps students maintain their skills through the summer months in preparation for a smooth start to fifth grade.

Part A:
Complete the attached packet and show your work. The packet was designed by teachers to provide practice with skills students need for fifth grade.

Part B:
Practice your fact fluency to improve your rate and accuracy. Students entering fifth grade are expected to automatically recall multiplication facts from 1x1 through 12x12. Here are some sites you can use to practice:
- Division Practice: Demolition Division, Division Derby, Drag Race Division and Pony Division
*Math is Fun https://www.mathsisfun.com/numbers/math-trainer-multiply.html
- Multiplication Trainer

Additional practice with key mathematical concepts can also be found on IXL. Below are core skills and concepts essential for success in fifth grade.

A.7: choose word names for numbers up to one hundred million
A.8: write word names for numbers up to one hundred million
BB.11: area and perimeter
BB.12: volume
D.10: multiply two digit by two digit numbers
E.8: divide larger numbers by one digit numbers
F.1: add, subtract, multiply, divide
F.10: perform multiple operations with whole numbers
I.1: objects on coordinate grid
M.4: add and subtract money amounts
S.10: multiply fractions by whole numbers
T. 15: compare decimal numbers
U.1: add decimal numbers
U.2: subtract decimal numbers

Thank you for supporting our efforts to reinforce students’ math skills to prepare for a successful start to fifth grade.
If you have any questions regarding the assignment, please contact the Samuel Mickle main office at 856-423-0412, extension 1040. Thank you.

Sincerely,

Andrea Evans
Add Dollars and Cents

To add money amounts, line up the decimal points and then add as with whole numbers.

Find the sum.

$38.37 + $41.47

**Step 1**
Write the problem on grid paper. Align the digits by place value. Think of pennies as hundredths and dimes as tenths.

**Step 2**
Add the hundredths. Regroup 14 hundredths as 1 tenth 4 hundredths. Write 1 in the tenths column. Then add the tenths.

**Step 3**
Add the ones and then add the tens. Regroup if necessary. Write the decimal point and dollar sign.

So, $38.37 + $41.47 = $79.84.

Find the sum.

5. $37.60 + $9.04
6. $80.26 + $19.31
7. $48.04 + $64.65
8. $52.66 + $50.48
Subtract Dollars and Cents

You can count up to find a difference.

Find the difference.

$48.32 - $12.50

Step 1  Start with $12.50, the amount being subtracted. Count up until you reach $48.32. Record each amount that you use to count up.

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>$12.50</td>
<td>$13</td>
<td>$20</td>
<td>$48</td>
</tr>
<tr>
<td>$48.32</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Step 2  Add the distances between counts to find the difference.

$0.50 + $7.00 + $28.00 + $0.32 = $35.82

So, $48.32 - $12.50 = $35.82.

Find the difference.

5.  $47.90 - $8.34
6.  $60.24 - $14.10
7.  $78.54 - $9.62
8.  $52.00 - $10.98
Algebra • Order of Operations

The order of operations is a set of rules that gives the order in which calculations are done in an expression.

Use the order of operations to find the value of the expression.
Show each step.

\[ 8 + (10 ÷ 5) - 4 \]

Step 1
First divide.
Think: \( 10 ÷ 5 = 2 \)

\[ 8 + (10 ÷ 5) - 4 \]
\[ 8 + 2 - 4 \]
\[ 10 - 4 \]

So, \( 8 + (10 ÷ 5) - 4 = 6 \).

Order of Operations
1. First, perform operations inside the parentheses.
2. Then, multiply and divide from left to right.
3. Last, add and subtract from left to right.

Write correct if the operations are listed in the correct order.
If not correct, write the correct order of operations.

1. \( (9 ÷ 3) × 4 \) multiply, divide

2. \( 15 - (8 ÷ 2) \) subtract, divide

Follow the order of operations to find the value of the expression.
Show each step.

5. \( (6 × 7) + 3 \)

7. \( (20 - 5) × 3 + 4 \)
Place Value Through Millions

You can use a place-value chart to help you read and write numbers through millions.

You can group the digits in a whole number into sections called periods. Each period has 3 digits.

Each digit in a whole number has both a place and a value. In the place value chart below, the digit 3 is in the hundred thousands place. So its value is $3 \times 100,000$, or 300,000.

<table>
<thead>
<tr>
<th>Periods</th>
<th>Millions</th>
<th>Ten Millions</th>
<th>Millions</th>
<th>Hundred Thousands</th>
<th>Ten Thousands</th>
<th>Thousands</th>
<th>Hundreds</th>
<th>Tens</th>
<th>Ones</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>8</td>
<td>7</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>6</td>
<td>5</td>
<td>9</td>
</tr>
</tbody>
</table>

Use the place-value chart to read and write the number in standard form, word form, and expanded form.

Standard Form: 287,314,659

Word Form: two hundred eighty-seven million, three hundred fourteen thousand, six hundred fifty-nine

Expanded Form: $200,000,000 + 80,000,000 + 7,000,000 + 300,000 + 10,000 + 4,000 + 600 + 50 + 9$

Read and write the number in two other forms.

1. sixty million, forty thousand, two hundred twenty-nine

2. $8,000,000 + 300,000 + 2,000 + 100 + 8$
Place Value to Compare Decimals

You can use a place-value chart to help you compare decimals.

Use a place-value chart to compare the decimals. Write <, >, or =.

4.28  4.23

Step 1 Write both decimals in a place-value chart.
Line up each place and the decimal.

Step 2 Compare the numbers in each place, starting with
the numbers in the ones place and working your way right.

<table>
<thead>
<tr>
<th>Ones</th>
<th>.</th>
<th>Tenths</th>
<th>Hundredths</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td></td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

4 = 4   2 = 2   8 > 3

Step 3 Since 8 is greater than 3, 4.28 is greater than 4.23.
So, 4.28 > 4.23.

1. Use the place-value chart below to compare the decimals.
Write <, >, or =.

<table>
<thead>
<tr>
<th>Ones</th>
<th>.</th>
<th>Tenths</th>
<th>Hundredths</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td></td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>9</td>
<td>7</td>
</tr>
</tbody>
</table>

8 = 8   9 = 9   2 < 7

So, 8.92 < 8.97.

Compare the decimals. Write <, >, or =.

6. 2.56  2.5
7. 3.7  3.70
8. 7.22  7.2
Decompose Multiples of 10, 100, 1,000

You can decompose a multiple of 10, 100, or 1,000 by finding its factors.
- To decompose a multiple of 10: rewrite it as the product of 10 and another number.
- To decompose a multiple of 100: rewrite it as the product of 100 and another number.
- To decompose a multiple of 1,000: rewrite it as the product of 1,000 and another number.

Decompose 3,200.

One Way Use mental math and a pattern.

3,200 = \underline{3,200} \times 1
3,200 = \underline{320} \times 10
3,200 = \underline{32} \times 100

So 3,200 = 32 \times 100.

Another Way Use place value.

3,200 = 32 hundreds = 32 \times \underline{100}

So 3,200 = 32 \times 100.

1. Complete the exercise below to decompose 3,600.

3,600 = \underline{_____} \times 1
3,600 = \underline{_____} \times 10
3,600 = \underline{_____} \times 100

2. Complete the exercise below to decompose 870.

870 = \underline{_____} tens = \underline{_____} \times \underline{_____}

Decompose each number.

3. 90 = \underline{_____}  4. 5,600 = \underline{_____}  5. 3,000 = \underline{_____}
Compare Fraction Products

When a fraction less than one is multiplied by a whole number, is the product less than or greater than the fraction?

Is the product of $\frac{3}{4} \times 2$ less than or greater than $\frac{3}{4}$?

Step 1 Show two groups of $\frac{3}{4}$.

The model shows $\frac{6}{4}$ shaded.

Step 2 Compare. The product $\frac{6}{4}$ is **greater than** $\frac{3}{4}$.

So, the product of $\frac{3}{4} \times 2$ is greater than $\frac{3}{4}$.

When a whole number is multiplied by a fraction less than one, is the product less than or greater than the whole number?

Is the product of $3 \times \frac{3}{5}$ less than or greater than 3?

Step 1 Show three groups of $\frac{3}{5}$.

The model shows $\frac{9}{5}$ shaded.

Step 2 Compare. The product $\frac{9}{5}$ is **less than** 3.

So, the product of $3 \times \frac{3}{5}$ is less than 3.

Complete each statement with **greater than** or **less than**.

1. $2 \times \frac{5}{6}$ will be **less than** $\frac{5}{6}$.
2. $\frac{3}{8} \times 2$ will be **greater than** 2.
3. $3 \times \frac{2}{3}$ will be **less than** 3.
4. $\frac{2}{3} \times 4$ will be **greater than** $\frac{2}{3}$. 
Fractions and Division

You can use division to make equal shares or to make equal-sized groups. You can use a fraction to show division.

Write the division problem as a fraction.

\[ \frac{3}{4} \]

You can use fraction strips to model the relationship between division and fractions.

**Step 1**
Begin with 3 wholes.

**Step 2**
Think of each whole as 4 fourth-size pieces.

**Step 3**
Arrange the fourth-size pieces into 4 equal groups.

So, \( 3 \div 4 \) can be written as \( \frac{3}{4} \).

Write the division problem as a fraction. Write each fraction greater than 1 as a whole number or mixed number.

1. \( 9 \div 3 \)  
2. \( 1 \div 6 \)  
3. \( 2 \div 8 \)  
4. \( 5 \div 4 \)  
5. \( 7 \div 2 \)  
6. \( 12 \div 8 \)
Locate Points on a Grid

A map has horizontal and vertical lines that make a grid. You can name a point on the grid using an ordered pair of numbers.

The first number tells how many units to move right from zero. The second number tells how many units to move up from zero.

Write the ordered pair for the location of the park.

Step 1 Start at zero. Move right. Count the number of units until you are directly below the park.

You move right 2 units.

Step 2 Move up. Count the number of units until you reach the park.

You move up 3 units.

Step 3 You move right 2 units and up 3 units, so the ordered pair is (2, 3).

So, the park is located at (2, 3) on the map.

Use the grid. Write the ordered pair for each point.

1. A  2. B

Use the grid. Write the point for each ordered pair.

5. (8, 0)  6. (9, 10)
Area and Tiling

In the model, whole tiles are shaded, and some half tiles are shaded. You can combine the areas of half tiles and whole tiles to find the total area.

Find the area of the entryway. Write the area in square feet.

Step 1  Count the number of whole tiles. There are 42 whole tiles.

Step 2  Count the number of half tiles. There are 6 half tiles.

Think: 2 half tiles = 1 whole tile
6 half tiles = 3 whole tiles

Step 3  Use the total number of whole tiles to find the area.

42 + 3 = 45 whole tiles

Think: 1 tile = 4 square feet

Multiply the number of whole tiles by 4 to find the area.

45 \times 4 = 180

So, the area of Marta's entryway is 180 square feet.

Find the area of each shaded shape. Write the area in square units.

1. 

1 square = 4 square feet

2. 

1 square = 9 square meters

3. 

1 square = 16 square miles
Multiply Three Factors

Step 1
Simplify the problem. Rewrite \(2 \times (14 \times 6)\) as a product of two factors.

\[
2 \times (14 \times 6) = 2 \times (\_ \times 14) \quad \text{Commutative Property}
\]

\[
= (2 \times \_ \times 14) \quad \text{Associative Property}
\]

\[
= 12 \times 14
\]

So, \(2 \times (14 \times 6) = 12 \times 14\).

Step 2
Multiply.

\[
\begin{array}{c}
\phantom{+}12 \\
\times 14 \\
\hline
\phantom{+}48 \\
+120 \\
\hline
168
\end{array}
\]

\(4 \times 12\)

\(10 \times 12\)

Add.

So, \(2 \times (14 \times 6) = 168\).

Find each product.

1. \(3 \times (16 \times 4) = \)

2. \(4 \times (16 \times 7) \times 3 = \)

3. \(5 \times (13 \times 5) = \)

4. \((12 \times 8) \times 6 = \)
Find Area of the Base

A rectangular prism is a solid figure that has three-dimensions: length, width, and height. A rectangular prism has two bases. The bases are the same size and shape and are opposite each other. The base shape of a rectangular prism is a rectangle or a square.

You can use the area formulas for a rectangle and a square to find the area of the base of a rectangular prism.

Find the area of the base of the rectangular prism.

Step 1 Identify the base shape.

The length is 6 feet.
The width is 4 feet.
The base shape is a rectangle.

Step 2 Find the area of the base shape.

\[ A = l \times w \] Think: Use the area formula for a rectangle.

\[ = \frac{6}{5} \times \frac{4}{2} \]

\[ = 24 \text{ square feet} \]

So, the area of the base is 24 square feet.

Find the area of the base of the rectangular prism.

1.

3.

4.

6.
Decimals and Place Value

You can write decimals, like whole numbers, in standard form, word form, and expanded form.

In a place-value chart, whole numbers are to the left of the decimal point. Decimal amounts are to the right of the decimal point. The value of each place is one-tenth, or \( \frac{1}{10} \), of the place to its left.

When you write a decimal in word form, write the decimal point as "and."

Write the decimal 12.34 in word form and expanded form.

Start by writing 12.34 in a place-value chart. First, align the decimal point with the decimal in the chart. Then place the digits.

<table>
<thead>
<tr>
<th>Hundreds</th>
<th>Tens</th>
<th>Ones</th>
<th>Tenths</th>
<th>Hundredths</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td></td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>( \frac{1}{10} \times 10 )</td>
<td>( \frac{2}{1} \times 1 )</td>
<td>( \frac{3}{10} \times \frac{1}{10} )</td>
<td>( \frac{4}{100} \times \frac{1}{100} )</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>2</td>
<td></td>
<td>( \frac{3}{10} )</td>
<td>( \frac{4}{100} )</td>
</tr>
</tbody>
</table>

Word form: 12.34  Two decimals indicate hundredths.

Twelve and thirty-four hundredths

Expanded Form: Use the last row of the chart to help you write the decimal in expanded form.

\[ 12.34 = 10 + \frac{2}{1} + 0.3 + 0.04 \]

Read and write the decimal in two other forms.

1. eight and seven tenths

2. 10 + 3 + 0.9 + 0.05