

Gull Lake Community Schools

# Summer Math Packet 5th Grade



Funding provided by
Gull Lake Community Schools Foundation

Dear student,

It's a sad fact that almost everyone forgets how to do some math over the summer. Because we want you to be as ready as possible for 6<sup>th</sup> grade next fall, we have these practice sheets for you. All you have to do is a few problems each day for eight weeks. Print the sheets off and send them back completed in the fall to Ryan Intermediate and you will get two things: a little token (also known as a *prize*) and a little jump start to the fall. (Won't it feel good to remember how to do things that other kids in your class have forgotten?)

We have also written a letter to your parents (p. 19) and have included some activities you can do online to improve your skills (p. 20-21). As John Adams (a famous American) said, "Practice makes perfect." But the main thing you need to remember is that **math is fun!** 

Multiply, using standard algorithm and area model.

a. 345 <u>x 34</u>

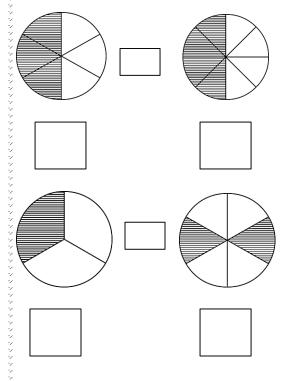
|    | X | 300 | + 40 | + 5 |
|----|---|-----|------|-----|
| 30 |   |     |      |     |
| +  |   |     |      |     |
| 4  |   |     |      |     |
|    |   |     |      |     |

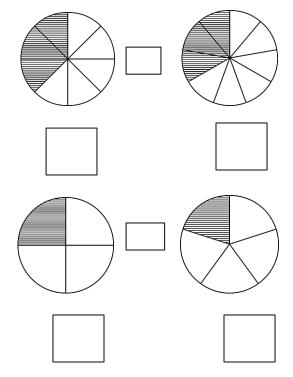
(Hope you got the same answers each way!)

Practice your multiplication facts for 15 minutes.

Parent signature:

Name the fractions, then compare using < = >





#### Evaluate the following expressions:

(Remember PEMDAS or "Please Excuse My Dear Aunt Sally." But also remember that with the multiplication and division, you do whatever is first from left to right and the same is true with addition and subtraction.)

a. 
$$25 + (3 \div 3) \times 4$$

c. 
$$42-(35+3)+10$$

Jack and Jill counted the rectangles in this tile pattern:

How many tiles did they count?

You are 1/8 of the way finished! How much to go?

a.

$$\frac{1}{2}$$
=  $+\frac{1}{4}$ =

b

$$\frac{1}{2} = -\frac{1}{8} =$$

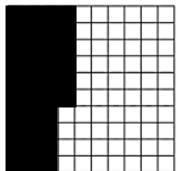
C

$$\frac{1}{8} = +\frac{1}{4} =$$

Practice your multiplication facts for 15 minutes.

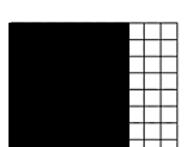
Parent signature:

Write a decimal and fraction for the shaded area of the 100 grids.



•

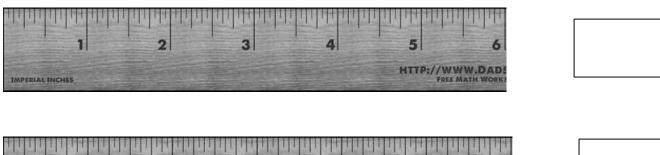


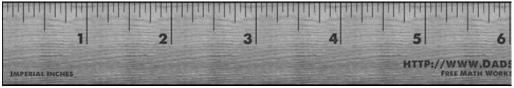






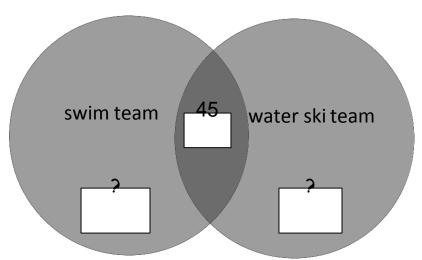
#### Measure to the nearest 1/8 of an inch.







Water sports are very popular at Gull Lake Middle School. There are 70 boys and girls who swim on a swim team. There are 60 who are competitive water-skiers, and 45 who are on both the swim and water skiing team. There are 85 students in water sports altogether. How many students are ONLY on the swim team and how many are ONLY on the water ski team? (Hint: use the Venn diagram to help you.)



85 total students in water sports.

 $\frac{1}{4}$  done -good job!

# Divide, using rectangular sections

Example: 
$$5)\overline{3245}$$

$$600 + 40 + 9 = 649$$

$$3245 245 45$$

| 4 | 2378 |  |  |
|---|------|--|--|
|---|------|--|--|

Practice your multiplication facts for 15 minutes.

| Parent signature: |
|-------------------|
|-------------------|

Fill in the missing data in the tables.

| Rule: mu | Rule: multiply by 4 |  |  |  |  |
|----------|---------------------|--|--|--|--|
| Input    | Output              |  |  |  |  |
| 22       | 88                  |  |  |  |  |
| 15       |                     |  |  |  |  |
|          | 100                 |  |  |  |  |
| 12       |                     |  |  |  |  |
|          | 32                  |  |  |  |  |

| Rule: Div | Rule: Divide by 10 |  |  |  |  |
|-----------|--------------------|--|--|--|--|
| Input     | Output             |  |  |  |  |
| 95        | 9.5                |  |  |  |  |
| 15        |                    |  |  |  |  |
|           | 100                |  |  |  |  |
| 12        |                    |  |  |  |  |
|           | 32                 |  |  |  |  |

Every day the gulls come to Gull Lake to look for food left by boaters. On the first day, 5 gulls arrive. The next day, 6 more gulls arrive. On the third day, 7 more gulls arrive. Each day, one more gull arrives than did the day before. At this rate, how many gulls will be there on the eighth day? (Fill out the table to solve.)

| Day   | 1 | 2  | 3  | 4 | 5 | 6 | 7 | 8 |
|-------|---|----|----|---|---|---|---|---|
| Gulls | 5 | 6  | 7  |   |   |   |   |   |
| Total | 5 | 11 | 18 |   |   |   |   |   |

3/8 done, how much left?

a.  $4 \times 4 =$ 

e.  $25 \div 5 =$ 

b.  $4 \times 40 =$ 

f.  $250 \div 5 =$ 

c.  $4 \times 400 =$ 

 $g. 2500 \div 5 =$ 

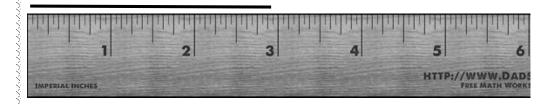
 $d. 4 \times 4000 =$ 

h. 25000 ÷ 5 =

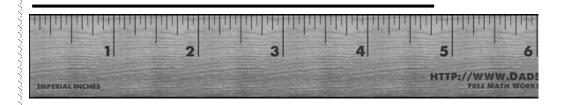
Practice your multiplication facts for 15 minutes.

Parent signature:

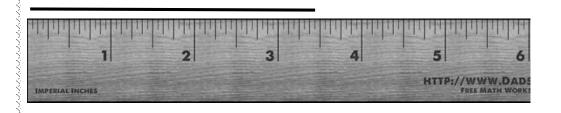
Measure to the nearest 1/8 inch.

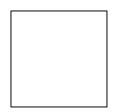








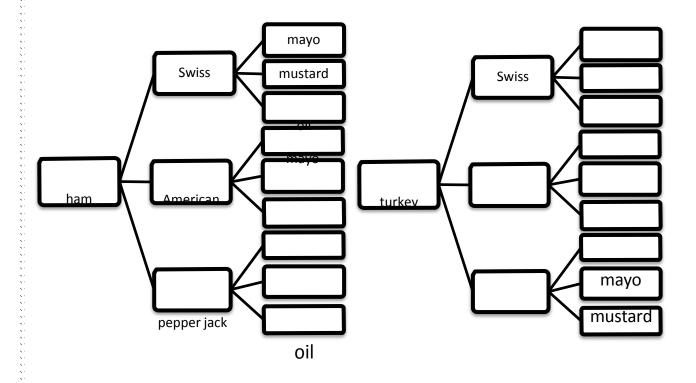




List all the **factors** of 36: 1,36,\_\_\_\_,\_\_\_,\_\_\_,\_\_\_,\_\_\_\_

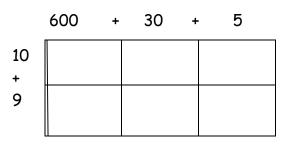
List the first ten **multiples** of 6: <u>6</u>, <u>12</u>, \_\_\_\_, \_\_\_, \_\_\_, \_\_\_, \_\_\_\_, \_\_\_\_,

Kyle, Jake, Nathaniel, and Silbano decided to start a sandwich shop. They had two kinds of meat: ham and turkey. They also had three kinds of cheese: Swiss, American, and pepper jack. They had a choice of three sauces: mayonnaise, mustard, and oil. If they only put one meat, one cheese and one sauce on each sandwich, what are all the different sandwiches they could make? (Use the decision tree to help.)



Multiply, using standard algorithm and area model.

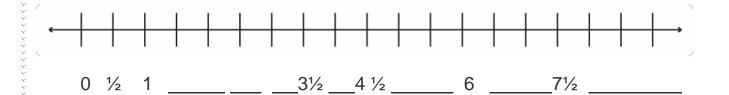
635 <u>x 19</u>



Practice your multiplication facts for 15 minutes.

Parent signature:

Fill in the missing numbers on the number line.





0 1/4 1/2 3/4 1 \_\_\_11/2 13/4\_\_\_\_\_\_\_3 \_\_\_\_4 41/4 \_\_\_\_

| Round each number to the nearest 10:  |     |      |     |  |  |
|---------------------------------------|-----|------|-----|--|--|
| 37                                    | 45  | 113  | 62  |  |  |
|                                       |     |      |     |  |  |
| Round each number to the nearest 100: |     |      |     |  |  |
| 359                                   | 120 | 1267 | 995 |  |  |

Nattalie, Liv, Lilli, and Ashley were planning where to go on vacation: Lake Michigan, the mountains, Chicago, or to the grandparents' farm. Liv loves to go to museums and go shopping. Ashley hates to swim and Lilli loves feeding animals. Which vacation will each person pick? (Finish the table to help you.)

|          | Lake Michigan | Mountains | Chicago | Farm |
|----------|---------------|-----------|---------|------|
| Nattalie |               |           | No      |      |
| Liv      | No            | No        | Yes     | No   |
| Lilli    |               |           | No      |      |
| Ashley   |               |           | No      |      |

5/8 done!

# Write equivalent fractions.

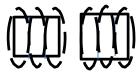
Practice your multiplication facts for 15 minutes.

Parent signature:

#### August 5 Solve by drawing a model:

Examples: 
$$1/3 \times 1/4 = \frac{1}{12}$$





$$4 \times 1/6 =$$

$$4/5 \div 4 =$$

$$3/5 \times 12 =$$

#### Evaluate the expressions:

a. 
$$3+3 \times 2+6=$$

b. 
$$9x(2+3)-2=$$

c. 
$$(3+5)+2-12=$$

Winter had to help her mother at the Laundromat. She has to pay \$2.00 for a load of wash, but the machine only takes quarters, dimes, and nickels. How many combinations of coins could she use? (You may need to add more rows.)

|   | Quarters | Dimes | Nickels | Total                      |
|---|----------|-------|---------|----------------------------|
| 1 | 8        | 0     | 0       | \$2.00                     |
| 2 | 7        | 2     | 1       | \$2.00<br>\$2.00<br>\$2.00 |
|   |          |       |         | \$2.00                     |
|   |          |       |         |                            |
|   |          |       |         |                            |
|   |          |       |         |                            |
|   |          |       |         |                            |
|   |          |       |         |                            |

Great job—only 1/4 to go! (So what fraction have you done?)

#### Divide, using rectangle sections

6)4518

8)7248

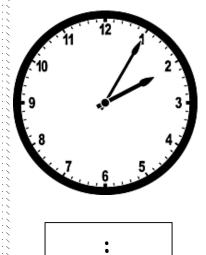
6 4518

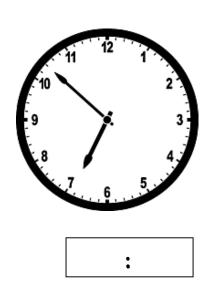
8 7248

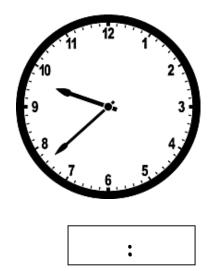
Practice your multiplication facts for 15 minutes.

Parent signature:

#### What time is it?







| Round    | to | the  | nearest  | hundr       | edth: |
|----------|----|------|----------|-------------|-------|
| NOUILLA. | 10 | 1116 | HEULEST. | 11111111111 | 2011  |

- a. 34.238
- b. 102.035
- c. 367.922

Round to the nearest tenth:

- d. 34.67
- e. 907.99
- f. 300.774

Cody gave Ryan these four cards: 3,4,5,6. How many ways can he arrange these? (The first few are started for you.)

3456

3465

3546

3564

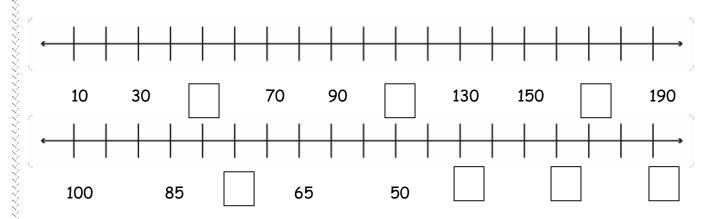
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3645

3654

7/8 done!!

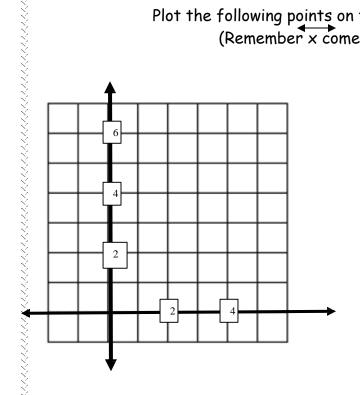
Fill in the missing numbers on the number line.



Practice your multiplication facts for 15 minutes.

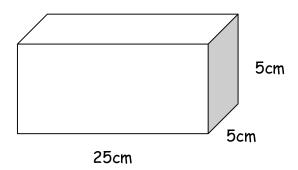
Parent signature:

Plot the following points on the graph. Then connect the lines. (Remember x comes first, y fcomes second.)



- a. (2,2)
- b. (4,2)
- c. (3,6)

Find the volume of the rectangular prism. (Don't forget to name the unit.)



Hunter, Trevor, and Jacob counted fireflies all summer. By the time school started, this number was:

- Greater than 195.
- Less than 300
- A number that is reached if he counted by 10.
- A number that can be evenly divided by 3 and 9.

How many fireflies did they count?

Great work! You're done! Don't forget to bring this packet to school to claim your prize!



Dear Parents/Guardians,

We have prepared these math sheets to help your child maintain math skills over the summer months. We hope you will offer support in seeing that these few problems are done each day. Knowing that summers are busy, we have tried to make the activities as fun and meaningful as possible.

In developing this packet, we looked at the National Common Core Standards of Math, which emphasize problem-solving. We also asked our middle school and high school colleagues the most important skills for our students to master. Their number one answer was to make sure that all students knew their multiplication facts. The second thing they said was to make sure that students had a basic understanding of fractions. Research also tells us that students who have a mental picture of a number line are more successful than those who don't. The packet's focus on number lines and fractions are intended to deal with the latter two skills. For learning multiplication facts, drill and practice is the best. We have included some multiplication fact drills, but with computer access, there are some games on the web resource page that are much more fun.

Finally, even some fifth grade students still need to learn to tell time (on an analogue

clock ), measure lengths, and count money. Fortunately, these life skills can be practiced with you every day! (These skills are generally not formally taught in math class after 3<sup>rd</sup> grade.)

We at Ryan look forward working with you as partners in helping your child maintain the math skills he or she will need in the fall. As an added incentive, we will give a small prize to anyone who brings a completed print the weekly problem pages back in the fall.

Have a wonderful summer and have fun with math!

# $\underline{\textbf{Math Websites for Students and Parents to Enjoy!}}$

| http://www.aplusmath.com                                 | This web site was developed to help students improve their math skills interactively. Included are math games, flash cards, worksheets and much more!                                     |
|--|---|
| http://www.aaamath.com                                   | AAA Math features interactive arithmetic lessons. Unlimited practice is available on each topic (Kindergarten through Eighth grade level), which allows thorough mastery of the concepts. |
| http://www.usmint.gov/kids/                              | Summer fun with coins! Join the US Mint to teach children about money.  |
| http://www.ixl.com/math/                                 | All concepts are based on Michigan math standards. Click on concept and practice and receive instant feedback. Used in 150 countries!   |
| http://nces.ed.gov/nceskids/createagraph/                | Learn how to graph! Here you will find five different graphs and charts for you to consider and to learn about.   |
| http://www.coolmath.com/                                 | An amusement park of math and more!   |
| http://www.discoveryeducation.com/free-puzzlemaker/      | Puzzlemaker is a puzzle generation tool for teachers, students and parents. Create and print customized math puzzles.   |
| http://www.quia.com/shared/                              | A website to browse through thousands of learning activities. All of the games and quizzes were created by educators.   |
| http://www.math.com/                                     | The world of math online! Math practices and more.  |
| http://www.mathfactcafe.com/                             | Learn your facts! The math facts factory.   |
| http://www.teachingtime.co.uk/index.html                 | Teaching time.  |
| http://timeanddate.com/                                  | Anything you want to know about dates and times around the world  |
| http://nlvm.usu.edu/en/nav/vlibrary.html                 | National Library of Virtual<br>Manipulatives  |
| http://nlvm.usu.edu/en/nav/category_g_2_t_3.html         | All about Geometry!   |
| http://illuminations.nctm.org/ActivityDetail.aspx?ID=155 | Learn your multiplication facts!  |
| http://www.mathsisfun.com/timestable.html                | Timed table facts 1-15 and mixed review   |

| http://www.econedlink.org/  | Money, Money!                        |
|---|--------------------------------------|
| http://illuminations.nctm.org/ActivityDetail.aspx?id=79               | Probability- Spin the spinner.       |
| http://pbskids.org/cyberchase/games/fractions/index.html              | Thirteen ways of looking at half- an |
|   | interactive game                     |
| http://www.bbc.co.uk/wales/snapdragon/yesflash/time-                  | Telling time- an interactive clock.  |
| <u>1.htm</u>  |                                      |
| http://www.mathplayground.com/  | An action-packed site for            |
|   | elementary and middle school levels. |
|   | Practice your math skills, play a    |
|   | logic game and have some fun!        |
| http://www.multiplication.com/  | All about multiplication! Games kids |
|   | love.                                |
| http://www.mathforum.com/   | The leading online resource for      |
|   | improving math learning since 1992.  |
| http://www.figurethis.org/index.html                                  | This site was created to help        |
|   | families enjoy mathematics outside   |
|   | school through a series of fun and   |
|   | engaging challenges.                 |
| http://www.mathcats.com/  | Math Cats provides playful           |
|   | explorations of important math       |
|   | concepts through games, crafts and   |
|   | interactive projects.                |
| http://www.funbrain.com/numbers.html                                  | This site includes 17 original games |
|   | based on soccer, baseball, car       |
|   | racing and much more                 |
| http://www.kidsites.com/sites-edu/math.htm                            | A list of math sites for kids!       |
| http://www.cobbk12.org/sites/literacy/math/math2.htm                  | Math skills practice activities      |
|   | grades 3-5. Includes number and      |
|   | operations, fractions, geometry,     |
|   | money, measurement, problem          |
|   | solving and data.                    |
| http://www.factmonster.com/math/knowledgebox/                         | Many fun games to practice math      |
| 1.44//  | skills. Check out Fraction Café.     |
| http://www.xpmath.com/forums/arcade.php?do=play&gameid=8#.UZ-fPUrfWSo | Various games which are aligned to   |
| 1                               | Common Core Math Standards.          |
|   |                                      |

# **3.**

9

# 4.

7

# **5.**

4

9

8. 7 6

6

5

**16.** 3 7

24.

**32.** 

$$\begin{array}{ccc}
 & 18. \\
 & 7 & 5 \\
 & \times 5 & \times 7
\end{array}$$

#### **27.**

5

# 28.

5

#### **29.**

7

#### **34.**

#### **35.**

#### **36.**

6

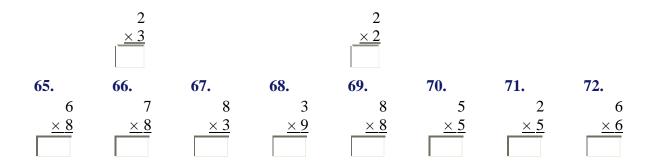
# **37.**

#### 44.

**49.** 

**57.** 

**58.** 



6

2

**49.** 

**58.** 

*5*7.

2. 7

#### **3.** 2

4. 5

2

3

7

8. 6 4

**10.** 6 6

#### 11.

8

#### **12.**

4

#### **13. 14.**

9

6

**16.** 

**18.** 8 4

# **19.**

9

# 20.

5

24. 3 4

6

**26.** 5

# **27.**

5

#### 28. 7

**29.** 5

21.

2

**32.** 

**40.** 

34. 4

# **35.**

2

# **36.**

6

#### **37.**

3

#### 38.

6

#### **39.**

8

#### 41.

#### **42.**

7

# 43.

4

# 44.

8

#### **45.**

7

#### 46.

8

48. 7

4

8

**49.** 

7

5

2

#### **51.**

4

#### **52.**

8

#### **53.**

7

#### **54.**

8

4

**64.** 

*5*7.

7

**60.** 5

3

2

2

**66.** 

<u>4</u>



**68.** 26 | Page



**16.** 

$$\begin{array}{c}
7 \\
\times 4
\end{array}$$

**49.** 

**40.** 

$$\begin{array}{c} 7 \\ \times 4 \end{array}$$

$$\begin{array}{c}
2 \\
\times 6
\end{array}$$

**68.** 

2

<u>6</u>

 69.
 70.
 71.
 72.

 5
 4
 9
 7

 5
 6
 7
 6
 ×
 ×
 ×
 ×
 ×

7

2. 2

7

**5.** 8

6

8.

6

**26.** 

2

**29.** 

38.

**32.** 

#### **36.**

$$\begin{array}{c} 3 \\ \underline{9} \\ \underline{\times 2} \end{array}$$

**40.** 

5

$$\frac{2}{\times 9}$$

**67.** 

2

<u>7</u>



$$\begin{array}{ccc}
 & 20. \\
 & 7 \\
 \times & 4 \\
 & \end{array}$$

$$\begin{array}{ccc}
8. & 24. \\
 & \times 7 & \times \\
\hline
\end{array}$$

**34.** 

**26.** 

$$\frac{3}{\times 2}$$

48.



3

**19.** 

$$\begin{array}{c}
\mathbf{20.} \\
4 \\
\times 5
\end{array}$$

$$\begin{array}{c}
 3 \\
 \times 5 \\
\hline
\end{array}$$

**29.** 

**40.** 

48.

7

9

**56.** 

**58.** 







2

5

5

**28.** 

6

31.

3

2

# 44.

#### **45.**

$$\begin{array}{c} 5 \\ \times 4 \\ \hline \end{array}$$

**49.** 

7

4

4

<u>3</u>

**65.** 

$$\frac{2}{\times 4}$$





8. 
$$2 \times 4$$

31.

$$\begin{array}{c}
2 \\
\times 6 \\
\hline
\end{array}$$

**28.** 

**32.** 

**40.** 

**67.** 

7

<u>6</u>