

Name: \_\_\_\_\_

6<sup>th</sup> Grade Math Teacher: \_\_\_\_\_

# ROSA PARKS MIDDLE SCHOOL



Summer Math Packet  
Incoming Grade 6

**Student Name:** \_\_\_\_\_

The Rosa Parks Math Department is requesting that students spend time over the summer reviewing math concepts. In addition to helping them retain their mathematical knowledge and gains made this year, this will also help prepare them for success upon their return to school in the fall. Students will need to complete a math packet for the course they are entering next year.

Students who complete the summer math booklet will be able to:

- Increase retention of math concepts,
- Work toward closing the gap in student performance,
- Apply math concepts to performance tasks, and

**This packet is due on the first day we return from summer, August 31, with a deadline of the Friday, September 4.**

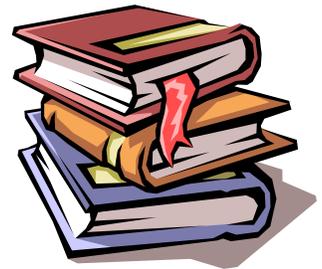
There are many excellent summer programs and websites also available. In addition to the math packet, students will have access to a site that is designed to help all MCPS middle grade students maintain their math skills during the summer months. These online resources will provide students with multiple opportunities to review concepts from this past school year. As students access the website they will select the page that matches the mathematics course they will be enrolling in for the upcoming school year (2020-2021). The course page will then provide links to several different units of study. Each unit will contain multiple online resources, such as video tutorials, games, and many more challenging tasks. Please make sure that your child is signed onto their google account prior to logging into the website otherwise students may not be able to easily access some of the resources. The online tools can be found on the following website:

<http://tinyurl.com/MCPSMathSummer>

### **Student Responsibilities**

Students will be able to improve their own math performance by:

- Completing the summer math booklet
- Reviewing math skills throughout the summer, and
- **Returning the math booklet to next year's math teacher.**



### **Parent Responsibilities**

Parents will be able to promote student success in math by:

- Monitoring student completion of the summer math booklet,
- Encouraging student use of math concepts in summer activities, and
- **Ensuring the return of the math booklet to school at the beginning of next school year.**

If you have any questions, you may contact the math resource teacher, Aimee Conway at

[Aimee\\_R\\_Conway@mcpsmd.org](mailto:Aimee_R_Conway@mcpsmd.org)

Thank you for your support and have a wonderful summer! We look forward to seeing you in September!

# Table of Contents

Equivalent Fractions .....	4
Fractions and Mixed Numbers .....	5
Multiplying and Dividing Fractions .....	6
Adding and Subtracting Fractions .....	7
Adding and Subtracting Decimals .....	8
Graphing .....	9
Multiplying Whole Numbers.....	10

**Do NOT use a calculator! Show work that you are not able to fit on the page using additional sheets of paper and attach.**

## Equivalent Fractions

Directions: Fill in the missing number to the fractions equivalent

$\frac{1}{2} = \frac{40}{80}$	$\frac{\quad}{6} = \frac{6}{18}$
$\frac{1}{8} = \frac{2}{\quad}$	$\frac{8}{3} = \frac{\quad}{12}$
$\frac{1}{4} = \frac{5}{\quad}$	$\frac{70}{100} = \frac{\quad}{10}$
$\frac{8}{16} = \frac{4}{\quad}$	$\frac{8}{11} = \frac{88}{\quad}$
$\frac{12}{13} = \frac{36}{\quad}$	$\frac{2}{1} = \frac{4}{\quad}$
$\frac{1}{8} = \frac{3}{\quad}$	$\frac{6}{9} = \frac{2}{\quad}$
$\frac{5}{6} = \frac{\quad}{30}$	$\frac{5}{10} = \frac{\quad}{2}$
$\frac{4}{11} = \frac{16}{\quad}$	$\frac{6}{7} = \frac{\quad}{42}$
$\frac{1}{9} = \frac{\quad}{72}$	$\frac{1}{3} = \frac{6}{\quad}$

## Mixed Numbers to Fractions Greater Than One

Directions: Re-write each mixed number to be a fraction greater than one.

$6\frac{1}{2} = \frac{13}{2}$	$2\frac{1}{8} = \text{---}$
$3\frac{1}{7} = \text{---}$	$5\frac{2}{3} = \text{---}$
$6\frac{1}{5} = \text{---}$	$7\frac{3}{10} = \text{---}$
$1\frac{1}{16} = \text{---}$	$2\frac{2}{5} = \text{---}$

## Fractions Greater Than One to Mixed Numbers

Directions: Re-write each mixed number to be a fraction greater than one.

$\frac{7}{5} = 1\frac{2}{5}$	$\text{---} = \frac{10}{3}$
$\text{---} = \frac{19}{4}$	$\text{---} = \frac{81}{10}$
$\text{---} = \frac{32}{5}$	$\text{---} = \frac{16}{3}$
$\text{---} = \frac{7}{2}$	$\text{---} = \frac{50}{4}$

## Multiplying Fractions

Directions: Multiply the two fractions to find the product.

$$1) \quad \frac{1}{2} \times \frac{4}{5} = \frac{4}{10} = \frac{2}{5}$$

$$6) \quad \frac{7}{18} \times \frac{3}{5} =$$

$$2) \quad \frac{1}{4} \times \frac{2}{5} =$$

$$7) \quad \frac{2}{20} \times \frac{8}{16} =$$

$$3) \quad \frac{2}{3} \times \frac{1}{2} =$$

$$8) \quad \frac{5}{15} \times \frac{4}{18} =$$

$$4) \quad \frac{3}{10} \times \frac{1}{2} =$$

$$9) \quad \frac{1}{4} \times \frac{2}{6} =$$

$$5) \quad \frac{3}{10} \times \frac{2}{5} =$$

$$10) \quad \frac{4}{9} \times \frac{8}{14} =$$

## Dividing Fractions

Remember, you must change each problem into multiplication to find the quotient.

$$1) \quad \frac{2}{4} \div \frac{4}{10} = \frac{2}{4} \times \frac{10}{4} = \frac{20}{16} = 1\frac{4}{16} = 1\frac{1}{4}$$

$$2) \quad \frac{1}{3} \div \frac{1}{2} =$$

$$3) \quad \frac{2}{5} \div \frac{1}{2} =$$

$$4) \quad \frac{2}{4} \div \frac{7}{10} =$$

$$5) \quad \frac{1}{5} \div \frac{1}{3} =$$

## Adding Fractions

Remember, you can only add fractions with like denominators.

$$1) \quad \frac{1}{8} + \frac{3}{8} =$$

$$5) \quad \frac{2}{3} + \frac{1}{2} =$$

$$2) \quad \frac{4}{12} + \frac{7}{12} =$$

$$6) \quad \frac{4}{5} + \frac{4}{10} =$$

$$3) \quad \frac{1}{9} + \frac{4}{9} =$$

$$7) \quad \frac{7}{10} + \frac{1}{2} =$$

$$4) \quad \frac{3}{11} + \frac{4}{11} =$$

$$8) \quad \frac{3}{4} + \frac{3}{5} =$$

### Subtracting Fractions

Remember, you can only subtract fractions with like denominators.

$$1) \quad \frac{4}{10} - \frac{2}{10} =$$

$$5) \quad \frac{2}{3} - \frac{1}{4} =$$

$$2) \quad \frac{7}{11} - \frac{1}{11} =$$

$$6) \quad \frac{1}{2} - \frac{2}{10} =$$

$$3) \quad \frac{2}{5} - \frac{1}{5} =$$

$$7) \quad \frac{6}{10} - \frac{2}{4} =$$

$$4) \quad \frac{3}{8} - \frac{2}{8} =$$

$$8) \quad \frac{1}{2} - \frac{2}{4} =$$

## Adding and Subtracting Decimals

$$\begin{array}{r} 1) \quad 89.61 \\ \quad -26.632 \\ \hline \end{array}$$

$$\begin{array}{r} 2) \quad 29 \\ \quad +27.69 \\ \hline \end{array}$$

$$\begin{array}{r} 3) \quad 71 \\ \quad -12.3 \\ \hline \end{array}$$

$$\begin{array}{r} 4) \quad 26 \\ \quad +13.824 \\ \hline \end{array}$$

$$\begin{array}{r} 5) \quad 51 \\ \quad -38.75 \\ \hline \end{array}$$

$$\begin{array}{r} 6) \quad 54.7 \\ \quad + 9.39 \\ \hline \end{array}$$

$$7) \quad 58 - 45.183 = \underline{\hspace{2cm}}$$

$$10) \quad 92 + 8.83 = \underline{\hspace{2cm}}$$

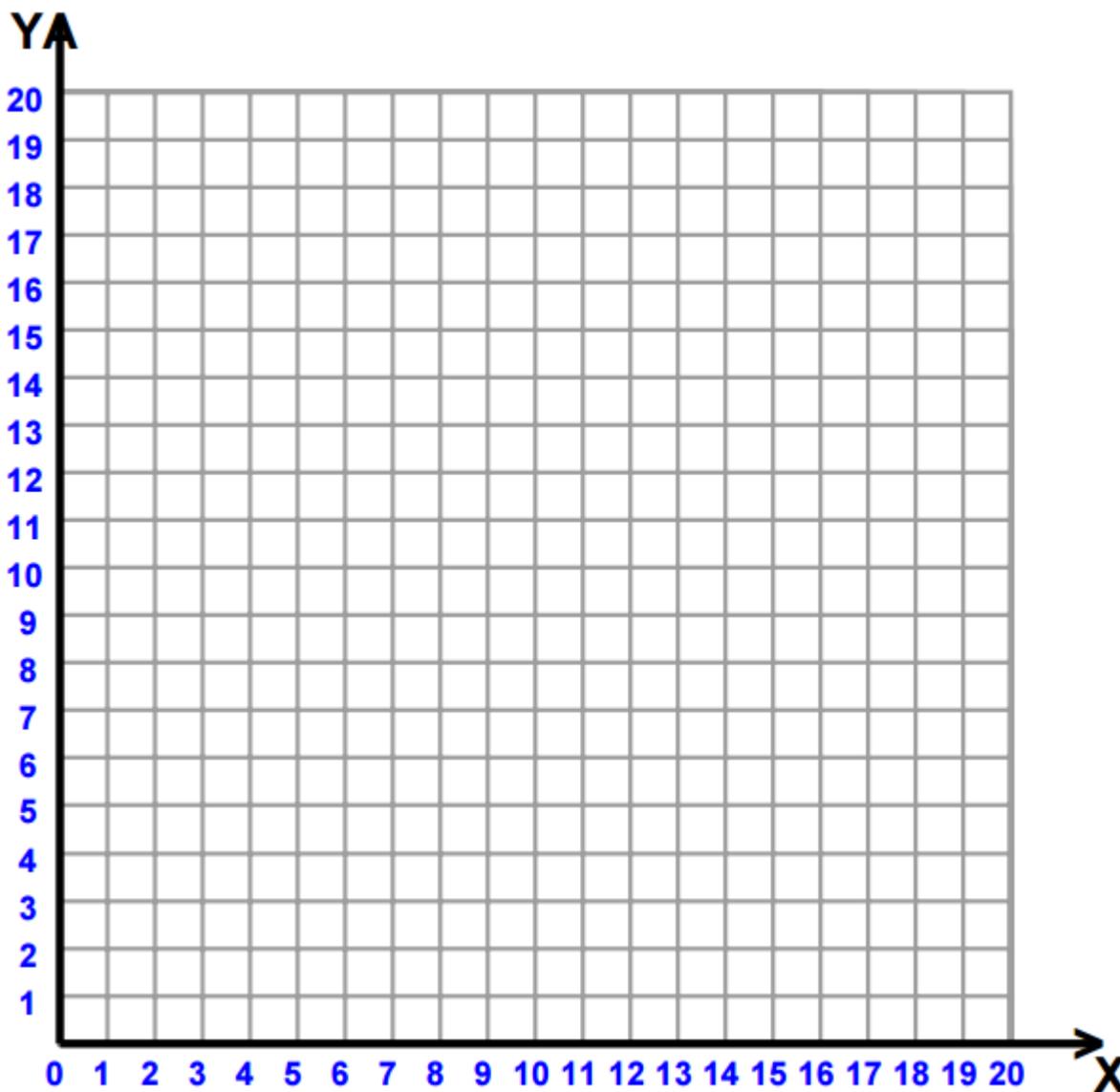
$$8) \quad 79.3 + 10.21 = \underline{\hspace{2cm}}$$

$$11) \quad 67.15 - 24.302 = \underline{\hspace{2cm}}$$

$$9) \quad 17 - 1.2 = \underline{\hspace{2cm}}$$

$$12) \quad 96 + 37.367 = \underline{\hspace{2cm}}$$

# Graphing



Directions: Plot the following points on the graph above.

Remember, coordinates are always (x,y)

**A** (5, 7)

**B** (10, 11)

**C** (20, 0)

**D** (3, 14)

**E** (15, 1)

**F** (4,9)

**G** (1, 1)

**H** (10, 10)

## Multiplying Whole Numbers

$$\begin{array}{r} 63 \\ \times 35 \\ \hline \end{array}$$

$$\begin{array}{r} 93 \\ \times 12 \\ \hline \end{array}$$

$$\begin{array}{r} 76 \\ \times 88 \\ \hline \end{array}$$

$$\begin{array}{r} 94 \\ \times 63 \\ \hline \end{array}$$

$$\begin{array}{r} 60 \\ \times 98 \\ \hline \end{array}$$

$$\begin{array}{r} 23 \\ \times 13 \\ \hline \end{array}$$

$$\begin{array}{r} 45 \\ \times 79 \\ \hline \end{array}$$

$$\begin{array}{r} 84 \\ \times 43 \\ \hline \end{array}$$

$$\begin{array}{r} 757 \\ \times 28 \\ \hline \end{array}$$

$$\begin{array}{r} 712 \\ \times 30 \\ \hline \end{array}$$

$$\begin{array}{r} 785 \\ \times 56 \\ \hline \end{array}$$

$$\begin{array}{r} 631 \\ \times 63 \\ \hline \end{array}$$

$$\begin{array}{r} 558 \\ \times 55 \\ \hline \end{array}$$

$$\begin{array}{r} 475 \\ \times 58 \\ \hline \end{array}$$

$$\begin{array}{r} 270 \\ \times 48 \\ \hline \end{array}$$

$$\begin{array}{r} 683 \\ \times 92 \\ \hline \end{array}$$