

SUMMER MATH REVIEW PACKET MIDDLE SCHOOL (6-8)

In lieu of asking all Middle School students to hand write and complete a series of problems which some might find super difficult and others might find super easy, we are asking our incoming Middle School students to practice their math skills this summer via a variety of online resources listed below. There are enough options here for everyone to find something enjoyable on their level as well as something challenging if they want to go for a challenge.

There is a math packet of problems available to complete for a boost to your fall semester math grade, however, completing it is optional. The written packet is not required. It is at the end of this document.

While we can't measure any student's activity or effort or time spent on any of the sites below, assigning a grade for summer math is not the point. We want to encourage students to review what they learned, and perhaps fill in some of the gaps they may have with additional practice. Similar to what we expect of our Middle School students during the year, we hope students will try by giving their best effort on several of these sites.

There are certainly other online options available. Your effort does not have to be limited to the list below, however you should find these options can provide a comprehensive math review for any student.

Excellent websites for fun learning and reinforcement of math skills:

<http://www.gregtangmath.com/games>

These games represent a revolutionary new approach to teaching math that combines common sense, creativity and clever thinking. They incorporate proven math strategies that are the foundation for great computational skills, challenging activities that appeal to kids and adults of all ages, and social gaming features that add a friendly, competitive dimension. Best of all, they're so fun they're addicting. Just learn to play - then play to learn!

Many of these are great. You definitely want to *Practice* the ONLINE GAMES first so you'll understand how to correctly answer and solve the puzzles. The TEACHING GAMES are easier to understand and helpful as well.

An example of one of the online games is <http://gregtangmath.com/kakooma>

Do you love the challenge of a great puzzle? KAKOOMA® provides an alternative way to practice math facts

<https://www.varsitytutors.com/aplusmath>

Select “Flashcards” or “Math Games” and choose an appropriate topic from there. They can practice adding, subtracting and multiplying. It’s important to practice the addition, subtraction, and multiplication facts in an effort to achieve mastery.

<https://www.mathsisfun.com/numbers/math-trainer-multiply.html>

The Math Trainer helps with adding, subtracting and multiplication. It is timed, but you can adjust the “cut off time” to as little as 2 seconds or as much as 1 day. Or at the HOME screen select GAMES and pick a game to play.

<https://www.funbrain.com/math-zone>

Lots of fun games to choose from.

<https://www.funbrain.com/games/fresh-baked-fractions>

http://www.eduplace.com/kids/hmm/practice/ep_4.html

Select a topic. Select a lesson. Click *Begin*.

www.adaptedmind.com Enter a parent email and you get one month free. You may find it’s worth a \$9.95/month subscription if your student finds the presentation appealing. The site adjusts the difficulty of the problems depending on whether or not the previous answer given was correct or incorrect. There are options for problem explanations when problems are answered incorrectly.

www.aaamath.com

At the top pick “Fourth” or “Fifth” for a challenge. Choose any of the activities like multiplication then select “play” option toward the top of the screen. 20 Questions and Countdown games are good ones although they are time based.

Additional Concept Practice and Learning:

- Additional Practice Websites:

<http://www.mathgames.com/grades/>

<http://www.worksheetworks.com>

<https://www.thatquiz.org>

<http://mathtop10.com/index.html>

- Math tutorial website:

Khan Academy: www.khanacademy.org

Math Playground: www.mathplayground.com

Ten Frame Fill (Free app)

(remediation) 10 Frame Fill" provides children practice with recognizing additive "10 Families" (e.g., 1 and 9, 2 and 8, etc.). Set the 10 Frame to fill in sequence or randomly

24 Game (This used to be a free app, but I believe it costs \$1.99 now)

The 24 Game is a math puzzle game for all ages used to exercise or improve quick thinking and mental math. The goal of the game is to combine 4 numbers into 1 number, equal to 24 by adding, subtracting, and multiplying

An offline game you can play is....

Take a deck of cards and remove the face cards (kings, queens, jacks). Aces are one. Divide the cards evenly among 2 players. Each player flips over a card. The first one to add the 2 numbers correctly the fastest wins the cards. After going through the pile of cards, the player with the most cards wins. You can do a multiplication version also.

Mill Springs Academy
Middle School
Summer Math Packet

This written packet is OPTIONAL and may be completed for a boost to your fall semester math grade.

No calculator allowed.

Addition Facts

$$\begin{array}{r} 1) \quad 3 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 2) \quad 8 \\ + 6 \\ \hline \end{array}$$

$$\begin{array}{r} 3) \quad 9 \\ + 7 \\ \hline \end{array}$$

$$\begin{array}{r} 4) \quad 2 \\ + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 5) \quad 6 \\ + 6 \\ \hline \end{array}$$

$$\begin{array}{r} 6) \quad 4 \\ + 1 \\ \hline \end{array}$$

$$\begin{array}{r} 7) \quad 5 \\ + 8 \\ \hline \end{array}$$

$$\begin{array}{r} 8) \quad 1 \\ + 9 \\ \hline \end{array}$$

$$\begin{array}{r} 9) \quad 2 \\ + 3 \\ \hline \end{array}$$

Subtraction Facts

$$\begin{array}{r} 1) \quad 9 \\ - 7 \\ \hline \end{array}$$

$$\begin{array}{r} 2) \quad 4 \\ - 0 \\ \hline \end{array}$$

$$\begin{array}{r} 3) \quad 6 \\ - 5 \\ \hline \end{array}$$

$$\begin{array}{r} 4) \quad 3 \\ - 1 \\ \hline \end{array}$$

$$\begin{array}{r} 5) \quad 8 \\ - 8 \\ \hline \end{array}$$

$$\begin{array}{r} 6) \quad 7 \\ - 2 \\ \hline \end{array}$$

$$\begin{array}{r} 7) \quad 12 \\ - 5 \\ \hline \end{array}$$

$$\begin{array}{r} 8) \quad 14 \\ - 9 \\ \hline \end{array}$$

$$\begin{array}{r} 9) \quad 27 \\ - 8 \\ \hline \end{array}$$

Multiplication Facts

$$\begin{array}{r} 1) \quad 2 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 2) \quad 6 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 3) \quad 1 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 4) \quad 3 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 5) \quad 7 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 6) \quad 9 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 7) \quad 4 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 8) \quad 5 \\ \times 0 \\ \hline \end{array}$$

$$\begin{array}{r} 9) \quad 6 \\ \times 7 \\ \hline \end{array}$$

Division Facts

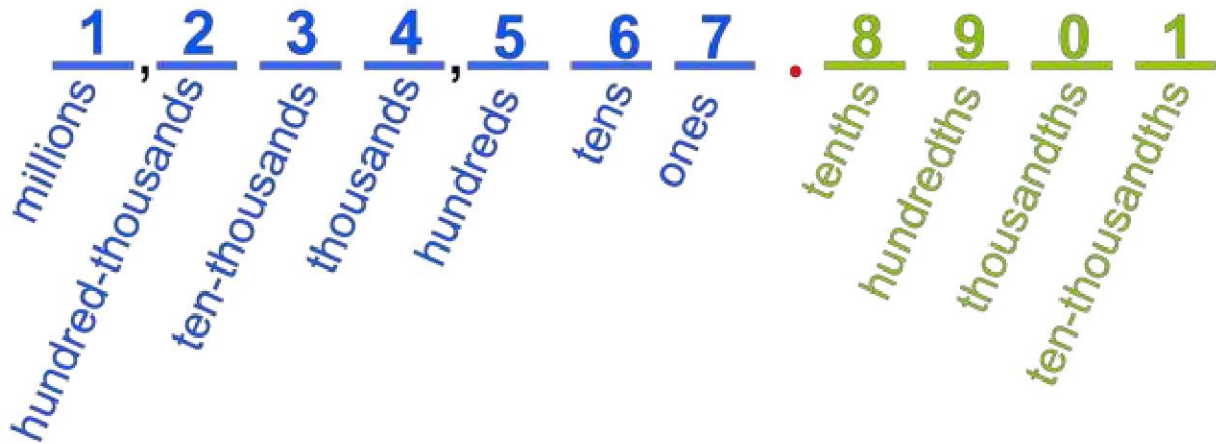
1) $12 \div 2 =$ _____ 2) $28 \div 4 =$ _____ 3) $27 \div 9 =$ _____

4) $7 \div 1 =$ _____ 5) $48 \div 6 =$ _____ 6) $24 \div 3 =$ _____

7) $0 \div 2 =$ _____ 8) $9 \div 9 =$ _____ 9) $30 \div 10 =$ _____

Place Value

Write the place value of the underlined number.



1) 560.08

2) 7.016

3) 24.47

4) 6,003

5) 3,005,600.07

Write the number that the name represents.

- 1) Forty-five thousandths

- 2) Seventeen and seven hundredths

- 3) Five million, three hundred thousand, twenty-nine, and six tenths

- 4) Six million and five thousandths

- 5) Two hundred eight thousand and four

List each group of numbers in order from LEAST to GREATEST. Pay careful attention to place value.

1) 20 4 .6 .08

2) 1.03 2.4 .89 .987

3) 14.8 2.68 .879 8.47

4) 54.89 56.3 58.1 52.98

Addition with Carrying

Show all of your work. You may NOT use a calculator.

$$\begin{array}{r} 1) \quad 6 \ 4 \ 9 \ 6 \\ + \ 3 \ 2 \ 8 \ 8 \\ \hline \end{array}$$

$$\begin{array}{r} 2) \quad 5 \ 4 \ 3 \ 9 \ 8 \\ + \ 6 \ 4 \ 5 \ 0 \ 8 \\ \hline \end{array}$$

$$\begin{array}{r} 3) \quad 3 \ 2 \ 5 \ 4 \\ + \ 4 \ 1 \ 9 \ 6 \\ \hline \end{array}$$

$$\begin{array}{r} 4) \quad 1 \ 9 \ 2 \ 4 \ 3 \\ + \ 7 \ 0 \ 6 \ 8 \\ \hline \end{array}$$

Subtraction with Borrowing

Show all of your work. You may NOT use a calculator.

$$\begin{array}{r} 1) \quad 754 \\ - 549 \\ \hline \end{array}$$

$$\begin{array}{r} 2) \quad 6391 \\ - 1286 \\ \hline \end{array}$$

$$\begin{array}{r} 3) \quad 98450 \\ - 14789 \\ \hline \end{array}$$

$$\begin{array}{r} 4) \quad 38904 \\ - 32899 \\ \hline \end{array}$$

Multi-Step Multiplication

Show all of your work. You may NOT use a calculator.

$$\begin{array}{r} 1) \quad 623 \\ \times \quad 5 \\ \hline \end{array}$$

$$\begin{array}{r} 2) \quad 1782 \\ \times \quad 65 \\ \hline \end{array}$$

$$\begin{array}{r} 3) \quad 92 \\ \times \quad 15 \\ \hline \end{array}$$

$$\begin{array}{r} 4) \quad 9012 \\ \times \quad 154 \\ \hline \end{array}$$

Multi-Step Division

Show all of your work. You may NOT use a calculator. There may or may not be a remainder.

1) $3 \overline{) 74}$

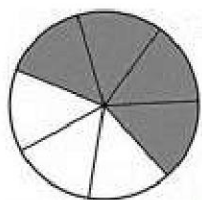
2) $4 \overline{) 56}$

3) $5 \overline{) 926}$

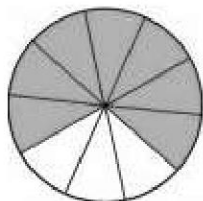
4) $6 \overline{) 831}$

Fractions

Write the fraction represented by each shaded picture or description.
Remember that a fraction is made up of a numerator (the number of shaded parts) over a denominator (the number of total parts).



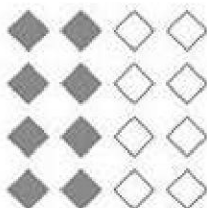
1) _____



2) _____



3) _____



4) _____

There are 7 flowers. 3 of the flowers are purple and 4 are white. What fraction of the flowers are purple?

5) _____

Decimals

Add or subtract. Be sure to line the decimals up & add zeros so that all of the numbers are the same length.

1) $15.7 + 2.34$

2) $64.038 - 2.7$

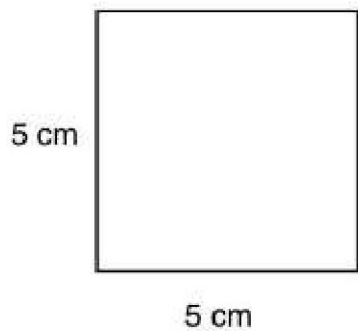
3) $87.001 + 2.96$

4) $29.8 - 15.321$

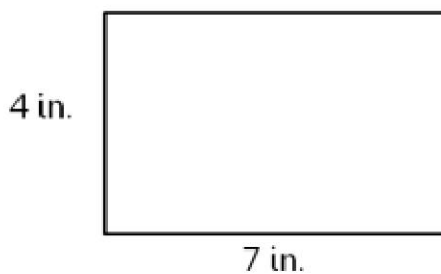
Perimeter & Area

Find the perimeter of each square or rectangle by adding up all of the sides. Find the area by multiplying the length by the width.

1) perimeter = _____ area = _____



2) perimeter = _____ area = _____



Mean, Median, Mode, & Range

Find the mean, median, mode, & range of each data set. Remember to put the numbers in order from least to greatest before you begin.

Mean (average): add up all numbers & divide by the number of numbers

Median: middle number when the numbers are lined up

Mode: number that appears the most times

Range: subtract the smallest number from the largest number

1) 5, 12, 6, 3, 8, 16, 8, 6

mean = _____

median = _____

mode = _____

range = _____

2) 2, 7, 4, 11, 12, 4, 6

mean = _____

median = _____

mode = _____

range = _____

Factors & Multiples

List all of the factors for each number. Circle the Greatest Common Factor.

1) 18 and 24

2) 12 and 15

List the first 10 multiples of each number. Circle the Least Common Multiple.

3) 4 and 6

4) 3 and 13