

RISING 6TH

St. Dominic Catholic School
6th Grade Summer Math Packet

Dear Incoming 6th Grade Families,

I am excited to meet you! Please complete this summer math packet before coming back to school in August. You should be able to do everything in the packet - please ask for help if you need it! Math facts may need practice over the summer to be able to do them quickly and correctly when you come back. Please review your work so you can be ready for your first quiz.

I've included some links to that might help you if you get stuck. You also might want to check out ixl.com which will let you try 20 questions per day. You do not need to buy the full version!

I hope you enjoy your summer break and look forward to seeing you in August!

Sincerely,

Mrs. Herbst

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	Math Topics	Khan Academy links
Arithmetic Operations	Adding Decimals	https://www.khanacademy.org/math/cc-fifth-grade-math/cc-5th-arith-operations
	Subtracting Decimals	
	Multi-Digit Multiplication	
	Multiplying Decimals	
	Multi-Digit Division	
	Dividing Decimals	
Fractions	Adding Fractions	https://www.khanacademy.org/math/cc-fifth-grade-math/cc-5th-fractions-topic
	Subtracting Fractions	
	Multiplying Fractions, Whole Numbers, and Mixed Numbers	
	Fractions as Division	
	Dividing with Fractions and Whole Numbers	
	Rewriting Fractions as Decimals	
Place Value and Decimals	Decimals in Different Forms	https://www.khanacademy.org/math/cc-fifth-grade-math/cc-5th-place-value-decimals-top
	Comparing and Rounding Decimals	
	Multiplying and Dividing Whole Numbers and Decimals by Powers of Ten	
	Regrouping Decimal Numbers	
Measurement and Data	Volume	https://www.khanacademy.org/math/cc-fifth-grade-math/cc-5th-measurement-topic
	Unit Conversion	
	Data	
Geometry	Coordinate planes	https://www.khanacademy.org/math/cc-fifth-grade-math/cc-5th-geometry-topic
	Quadrilaterals	
Algebraic Thinking	Writing Expressions	https://www.khanacademy.org/math/cc-fifth-grade-math/cc-5th-algebraic-thinking
	Number Patterns	

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Ways to practice/get help:

Your old (or new) math book

Flashcards

Khan Academy - khanacademy.org

IXL - ixl.com

Just Math Tutorials - <http://patrickjmt.com>

CliffsNotes (for math) - <https://www.cliffsnotes.com/study-guides/basic-math/basic-math-and-pre-algebra>

Hooda Math Games - <http://www.hoodamath.com/games.html>

Arcade Academics (Arcademics) - <http://www.arcademics.com>

You are more than welcome to do your work on another piece of paper - if so please make sure to keep it with this math packet!

FOUNDATIONS

I. Round Whole Numbers

1. Round each number to the nearest 1,000:

a) 84,548 _____ b) 40,430 _____ c) 57,535 _____

2. Round each number to the nearest 10,000:

a) 340,330 _____ b) 235,192 _____ c) 257,615 _____

3. Round each number to the nearest 100,000:

a) 626,601 _____ b) 988,887 _____ c) 708,831 _____

II. Multiply 2-Digit Numbers

1
$$\begin{array}{r} 65 \\ \times 74 \\ \hline \end{array}$$

2
$$\begin{array}{r} 30 \\ \times 42 \\ \hline \end{array}$$

3
$$\begin{array}{r} 42 \\ \times 79 \\ \hline \end{array}$$

4
$$\begin{array}{r} 15 \\ \times 81 \\ \hline \end{array}$$

5
$$\begin{array}{r} 89 \\ \times 40 \\ \hline \end{array}$$

6
$$\begin{array}{r} 12 \\ \times 13 \\ \hline \end{array}$$

7
$$\begin{array}{r} 83 \\ \times 68 \\ \hline \end{array}$$

8
$$\begin{array}{r} 45 \\ \times 76 \\ \hline \end{array}$$

III. Divide by 1-Digit Numbers (no remainders)

1
$$6 \overline{) 2514}$$

2
$$6 \overline{) 516}$$

3
$$4 \overline{) 244}$$

4
$$8 \overline{) 4288}$$

5
$$5 \overline{) 980}$$

6
$$8 \overline{) 304}$$

7

$$2 \overline{) 1548}$$

8

$$7 \overline{) 6475}$$

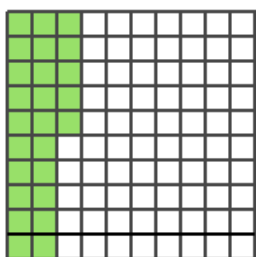
IV. Identify Factors and Multiples

- 1 $7 \times 8 = 56$ so which is true: 7 and 8 are factors of 56 and 56 is a multiple of 7 and 8 or 7 and 8 are multiples of 56 and 56 is a factor of 7 and 8
- 2 Which of the following numbers is a multiple of 5? 56 72 65 432
- 3 Which of the following numbers is a factor of 84? 9 8 7 6
- 4 What are all of the factors of 12? 1, 2, 3, 4, 5, 6 1, 2, 3, 4, 6, 12 12, 24, 36, 48, 60, ...

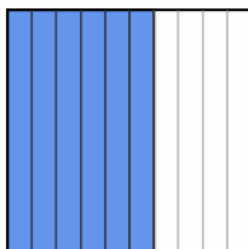
V. Multiply Fractions and Whole Numbers

- 1 $5 \times \frac{1}{4}$ 2 $6 \times \frac{2}{3}$
- 3 $4 \times \frac{1}{8}$ 4 $9 \times \frac{1}{10}$
- 5 $6 \times \frac{3}{4}$ 6 $7 \times \frac{3}{7}$
- 7 $9 \times \frac{1}{4}$ 8 $2 \times \frac{1}{5}$

VI. Write Number as a Fraction and Decimal



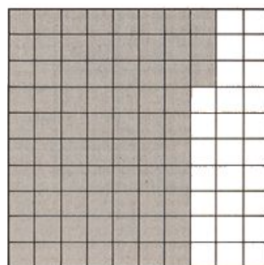
1. Express the shaded area as both a fraction and a decimal.



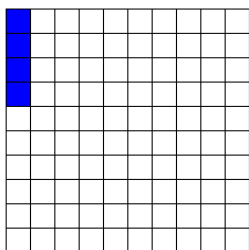
2. Express the shaded area as both a fraction and a decimal.



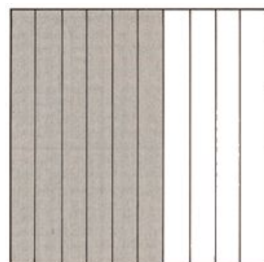
3. Express the shaded area as both a fraction and a decimal.



4. Express the shaded area as both a fraction and a decimal.



5. Express the shaded area as both a fraction and a decimal.



6. Express the shaded area as both a fraction and a decimal.

VII. Compare Decimals (tenths and hundredths)

Use $<$, $>$, or $=$ to compare the numbers.

1. 3.6 _____ 3.1

2. 9.73 _____ 9.7

3. 4.90 _____ 4.9

4. 6.09 _____ 6.9

5. 6.64 _____ 6.2

6. 1.7 _____ 1.70

7. 8.09 _____ 8.1

8. 6.3 _____ 6.16

ARITHMETIC OPERATIONS

I. Common Fractions And Decimals

Without a calculator, convert from fraction to decimal or decimal to fraction.

- | | | |
|--------------------------|---------------------------|-------------------|
| 1. $0.5 =$ _____ | 2. $\frac{1}{10} =$ _____ | 3. $0.99 =$ _____ |
| 4. $\frac{3}{4} =$ _____ | 5. $\frac{3}{6} =$ _____ | 6. $0.25 =$ _____ |

II. Add Decimals

- | | |
|---------------------------|---------------------------|
| 1. $1.08 + 1.67 =$ _____ | 2. $0.195 + 1.6 =$ _____ |
| 3. $0.46 + 0.247 =$ _____ | 4. $4.40 + 0.93 =$ _____ |
| 5. $0.329 + 1.42 =$ _____ | 6. $3.2 + 3.02 =$ _____ - |

III. Subtract Decimals

- | | |
|--------------------------|---------------------------|
| 1. $2.7 - 0.1 =$ _____ | 2. $6.5 - 0.3 =$ _____ |
| 3. $0.46 - 0.25 =$ _____ | 4. $4 - 0.93 =$ _____ |
| 5. $98.8 - 67.2 =$ _____ | 6. $3.2 - 3.02 =$ _____ - |

IV. Multi-Digit Multiplication

1 $59 \times 23 = \underline{\hspace{2cm}}$

2 $101 \times 47 = \underline{\hspace{2cm}}$

3 $4,234 \times 32 = \underline{\hspace{2cm}}$

4 $590 \times 427 = \underline{\hspace{2cm}}$

5 $85 \times 770 = \underline{\hspace{2cm}}$

6 $248 \times 982 = \underline{\hspace{2cm}}$

V. Multiply Decimals

1 $0.6 \times 0.1 = \underline{\hspace{2cm}}$

2 $0.8 \times 7 = \underline{\hspace{2cm}}$

3 $0.43 \times 0.8 = \underline{\hspace{2cm}}$

4 $0.9 \times 0.2 = \underline{\hspace{2cm}}$

5 $3.4 \times 6.1 = \underline{\hspace{2cm}}$

6 $0.75 \times 0.5 = \underline{\hspace{2cm}}$

VI. Basic Multi-Digit Division

1 $128 \div 16 = \underline{\hspace{2cm}}$

2 $9,815 \div 65 = \underline{\hspace{2cm}}$

3 $105 \div 21 = \underline{\hspace{2cm}}$

4 $2,250 \div 25 = \underline{\hspace{2cm}}$

5 $34 \div 17 = \underline{\hspace{2cm}}$

6 $108 \div 12 = \underline{\hspace{2cm}}$

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VII. Divide Decimals

Please express your answer as a decimal.

1 $3 \div 5 =$ _____

2 $15 \div 2 =$ _____

3 $51 \div 6 =$ _____

4 $2.3 \div 5 =$ _____

5 $0.48 \div 8 =$ _____

6 $0.8 \div 0.2 =$ _____

7 $0.47 \div 0.1 =$ _____

8 $4.5 \div 0.5 =$ _____

9 $6 \div 0.2 =$ _____

10 $7.5 \div 0.15 =$ _____

FRACTIONS

I. Add Fractions with Unlike Denominators

1 $\frac{1}{4} + \frac{1}{6} =$ _____

2 $\frac{3}{4} + \frac{3}{5} =$ _____

3 $\frac{1}{3} + \frac{3}{7} =$ _____

4 $\frac{2}{6} + \frac{5}{12} =$ _____

5 $\frac{1}{8} + \frac{2}{4} =$ _____

6 $\frac{2}{3} + \frac{4}{9} =$ _____

II. Subtract Fractions with Unlike Denominators

1 $\frac{4}{5} - \frac{1}{2} =$ _____

2 $\frac{4}{5} - \frac{3}{8} =$ _____

3 $\frac{7}{12} - \frac{1}{8} =$ _____

4 $\frac{7}{8} - \frac{2}{3} =$ _____

5 $\frac{1}{2} - \frac{1}{4} =$ _____

6 $\frac{14}{15} - \frac{4}{5} =$ _____

III. Add and Subtract Mixed Numbers with Unlike Denominators

1 $1\frac{1}{8} + 5\frac{2}{3} = \underline{\hspace{2cm}}$

2 $8\frac{2}{3} - \frac{2}{7} = \underline{\hspace{2cm}}$

3 $3\frac{5}{9} - 1\frac{2}{6} = \underline{\hspace{2cm}}$

4 $1\frac{1}{15} + 3\frac{4}{5} = \underline{\hspace{2cm}}$

5 $9\frac{5}{10} + 5\frac{3}{4} = \underline{\hspace{2cm}}$

6 $5\frac{2}{3} - 2\frac{1}{4} = \underline{\hspace{2cm}}$

IV. Multiplying Fractions

1 $\frac{4}{5} \times \frac{2}{6} = \underline{\hspace{2cm}}$

2 $\frac{3}{7} \times \frac{1}{2} = \underline{\hspace{2cm}}$

3 $\frac{3}{7} \times \frac{7}{3} = \underline{\hspace{2cm}}$

4 $\frac{6}{7} \times \frac{6}{7} = \underline{\hspace{2cm}}$

5 $\frac{1}{8} \times \frac{5}{6} = \underline{\hspace{2cm}}$

6 $\frac{3}{4} \times \frac{1}{10} = \underline{\hspace{2cm}}$

7 $\frac{5}{6} \times \frac{1}{4} = \underline{\hspace{2cm}}$

8 $\frac{2}{3} \times \frac{5}{8} = \underline{\hspace{2cm}}$

V. Multiply Mixed Numbers

1 $3\frac{2}{3} \times 1\frac{1}{4} = \underline{\hspace{2cm}}$

2 $\frac{3}{5} \times 2\frac{1}{2} = \underline{\hspace{2cm}}$

3 $5\frac{4}{7} \times 2\frac{3}{5} = \underline{\hspace{2cm}}$

4 $9\frac{1}{6} \times 4\frac{3}{4} = \underline{\hspace{2cm}}$

5 $10\frac{2}{5} \times \frac{1}{3} = \underline{\hspace{2cm}}$

6 $\frac{2}{7} \times 3\frac{5}{6} = \underline{\hspace{2cm}}$

VI. Dividing Unit Fractions by Whole Numbers

1 $\frac{1}{2} \div 5 = \underline{\hspace{2cm}}$

2 $\frac{1}{6} \div 3 = \underline{\hspace{2cm}}$

3 $\frac{1}{3} \div 4 = \underline{\hspace{2cm}}$

4 $\frac{1}{8} \div 2 = \underline{\hspace{2cm}}$

5 $\frac{1}{4} \div 2 = \underline{\hspace{2cm}}$

6 $\frac{1}{10} \div 7 = \underline{\hspace{2cm}}$

VII. Dividing Whole Numbers by Unit Fractions

1 $5 \div \frac{1}{3} = \underline{\hspace{2cm}}$

2 $2 \div \frac{1}{9} = \underline{\hspace{2cm}}$

3 $15 \div \frac{1}{3} = \underline{\hspace{2cm}}$

4 $3 \div \frac{1}{3} = \underline{\hspace{2cm}}$

5 $4 \div \frac{1}{4} = \underline{\hspace{2cm}}$

6 $2 \div \frac{1}{5} = \underline{\hspace{2cm}}$

$\begin{array}{r} 15 \\ -7 \\ \hline \end{array}$	$\begin{array}{r} 16 \\ -8 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ +6 \\ \hline \end{array}$	$\begin{array}{r} 64 \\ \div 8 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ +7 \\ \hline \end{array}$	$\begin{array}{r} 42 \\ \div 6 \\ \hline \end{array}$	$\begin{array}{r} 12 \\ \div 2 \\ \hline \end{array}$	$\begin{array}{r} 14 \\ -9 \\ \hline \end{array}$
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$\begin{array}{r} 9 \\ \div 3 \\ \hline \end{array}$	$\begin{array}{r} 1 \\ \times 1 \\ \hline \end{array}$	$\begin{array}{r} 16 \\ -8 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ \div 1 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 11 \\ -6 \\ \hline \end{array}$	$\begin{array}{r} 1 \\ +1 \\ \hline \end{array}$
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$\begin{array}{r} 9 \\ -6 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ +9 \\ \hline \end{array}$	$\begin{array}{r} 15 \\ \div 3 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ +4 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ \div 3 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ -3 \\ \hline \end{array}$	$\begin{array}{r} 16 \\ \div 4 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ \times 2 \\ \hline \end{array}$
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$\begin{array}{r} 7 \\ +7 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ +4 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ +1 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ +1 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ +7 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ +6 \\ \hline \end{array}$	$\begin{array}{r} 28 \\ \div 7 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ \times 2 \\ \hline \end{array}$
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$\begin{array}{r} 6 \\ \div 6 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ \times 6 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ +9 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ +6 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ \times 2 \\ \hline \end{array}$	$\begin{array}{r} 16 \\ -9 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ -4 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ \times 9 \\ \hline \end{array}$
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