

Timothy Christian School

Entering 6th Grade Math Packet

First and Last Name: _____

Place Value

Directions: In the following problems, write the place of the underlined number.

Examples: 4.832 tenths

228,927.803 ten thousands

1. 61.853 _____

2. 405,678 _____

3. 98.0078 _____

4. 238,970,245 _____

5. 4,031 _____

6. 12.32 _____

7. 811.903 _____

8. 75,912 _____

9. 561.892 _____

10. 14,005,678 _____

Directions: In the following problems, write the number form of the word form given

Example: Two hundred twelve and three tenths 212.3

1. four hundred three million, seventy-one thousand, three hundred sixteen _____

2. nineteen and seven hundred thirty-four thousandths _____

3. three billion _____

4. three hundredths _____

Addition and Subtraction

Directions: Solve each problem and show your work.

1. $\$323.41 + \$49.87 =$ _____

2. $\$18,845.67 + \$4,987.34 =$ _____

3. $8005 - 4466 =$ _____

4. $7004 - 1928 =$ _____

5. $\$80.00 - \$16.27 =$ _____

6. $9,785 + 12,579 =$ _____

Multiplication and Division

Directions: Solve each problem and show your work.

1. $534 \times 8 =$ _____

2. $439 \times 73 =$ _____

3. $456 \div 4 =$ _____

4. $4914 \div 78 =$ _____

5. $672 \times 89 =$ _____

6. $567 \times 6 =$ _____

Adding Fractions

Directions: Solve the problems and show your work. Make sure your answer is written in simplest form. **Hint:** *Find a common denominator.*

Example: $\frac{1}{4} + \frac{1}{4} = \frac{2}{4}$ Would **not** be correct because $\frac{2}{4}$ is not in simplest form.

$\frac{1}{4} + \frac{1}{4} = \frac{1}{2}$ Would be correct because $\frac{1}{2}$ is in simplest form.

Example: $\frac{1}{2} + \frac{2}{2} = \frac{3}{2}$ Would **not** be correct because it is an improper fraction.

$\frac{1}{2} + \frac{2}{2} = 1\frac{1}{2}$ Would be correct because it is a mixed number.

1. $\frac{1}{2} + \frac{1}{3} =$

2. $\frac{1}{4} + \frac{2}{5} =$

3. $\frac{3}{5} + \frac{7}{10} =$

4. $\frac{4}{9} + \frac{3}{6} =$

5. $\frac{3}{4} + \frac{1}{8} =$

6. $\frac{3}{4} + \frac{5}{12} =$

7. $2\frac{3}{4} + 5\frac{3}{5} =$

8. $3\frac{5}{12} + 4\frac{1}{4} =$

Multiplying Fractions

Directions: Solve each problem and write the answer in lowest terms.

Example: $\frac{1}{2} \times \frac{2}{3} = \frac{2}{6}$ $\frac{2}{6}$ is not in lowest terms so your final answer needs to be $\frac{1}{3}$

1. $\frac{1}{2} \times \frac{1}{2} =$

2. $\frac{9}{9} \times \frac{1}{3} =$

3. $\frac{7}{8} \times \frac{2}{3} =$

4. $\frac{1}{2} \times \frac{2}{6} =$

5. $\frac{1}{2} \times \frac{3}{4} =$

6. $\frac{6}{6} \times \frac{4}{8} =$

Multiplying Mixed Numbers

Example: $2\frac{3}{4} \times 3\frac{1}{2} =$ First convert mixed numbers to improper fractions so that the problem

becomes: $\frac{11}{4} \times \frac{7}{2} = \frac{77}{8}$ Convert your answer back to a mixed number: $9\frac{5}{8}$

1. $1\frac{1}{4} \times 2\frac{1}{2} =$

2. $1\frac{1}{3} \times 3\frac{1}{2} =$

3. $3\frac{3}{4} \times 1\frac{1}{4} =$

4. $\frac{3}{4} \times 3\frac{2}{5} =$

Greatest Common Factor

Directions: Find the Greatest Common Factor (GCF) for the numbers given. An example has been done for you.

Example: Find the GCF for 12 and 24. First find the factors of each. The factors of 12 are **12x1, 2x6, 3x4**. The factors of 24 are **1x24, 2x12, 3x8, 4x6**.

List the factors. 12: **1, 2, 3, 4, 6, 12** 24: **1, 2, 3, 4, 6, 8, 12, 24**

Find the numbers that they have in common (the same). **They have 1, 2, 3, 4, 6, 12 in common.**

The GCF is the largest number they have in common. **The GCF for 12 and 24 = 12**

1. 4, 8 _____

2. 5, 10 _____

3. 12, 20 _____

4. 14, 16 _____

5. 24, 6 _____

6. 3, 21 _____

7. 27, 72 _____

8. 60, 96 _____

Prime and Composite Numbers

Directions: Write the letter **P** next to the numbers that are Prime and the letter **C** next to the numbers that are Composite.

Hint: Prime numbers only have two factors (the number itself and one.) Composite numbers have more than two factors. **17 is a prime number** because the only factors of 17 are 1x17 (only two factors.) **14 is a composite number** because the factors are 1x14 and 2x7. There are four factors. The numbers 0 and 1 are considered neither prime or composite. All even numbers (except 2) are composite. Odd numbers can be prime or composite.

1. _____ 4

2. _____ 7

3. _____ 9

4. _____ 23

5. _____ 24

6. _____ 21

7. _____ 87

8. _____ 102

9. _____ 33

10. _____ 42

11. _____ 47

12. _____ 101

Order of Operations

Directions: Solve each problem according to the order of operations

Example: $15 - 3 \times 5 = 0$ The answer is not 60. You need to solve the multiplication part of the problem before you solve the subtraction. This is the order of operations: **PEMDAS**

Parentheses, Exponents, (Multiplication & Division), (Addition & Subtraction)

1. $15 \times (8 - 6) =$ _____

2. $(24 - 8 \times 2) + 2 =$ _____

3. $14 - 4 \times 3 =$ _____

4. $100 + 6 \times 2 =$ _____

5. $3 \times (12 - 10) =$ _____

6. $5 + 3 \times 2 - 3 =$ _____

7. $(4 \times 4) - 7 + 3 =$ _____

8. $(8 \times 6) + 2 =$ _____

9. $5 + 12 \times 2 =$ _____

10. $10 + (4 \times 5) =$ _____