

# INFORMAL MATH PROBES – GRADE 5

can correctly

## NUMERATION:

- Read numbers from .001 to 1 billion in \_\_\_\_/5 attempts.
- Write numbers from .001 to 1 billion in \_\_\_\_/5 attempts.

## SUBTRACTION:

- Subtract 3 digits from 3 digits with regrouping in \_\_\_\_/5 problems.

## MULTIPLICATION:

- Multiply facts with \_\_\_\_% accuracy, \_\_\_\_ (number) problems completed in one minute.
- Multiply 3-digit by 1-digit numbers in \_\_\_\_/5 problems.
- Multiply 3-digit by 2-digit numbers in \_\_\_\_/5 problems.
- Square numbers 1-12 in \_\_\_\_/5 problems

## DIVISION:

- Divide 3-digit by 1-digit with remainders in \_\_\_\_/5 problems.
- Divide 3 digits by 2 digits with remainders in \_\_\_\_/5 problems.

## DECIMALS:

- Multiply decimals by natural numbers 1-9 in \_\_\_\_/5 problems
- Divide decimals by natural numbers 1-9 in \_\_\_\_/5 problems

## FRACTIONS: (LCD-Lowest Common Denominator)

- Write \_\_\_\_/5 fractions in lowest terms.
- Add fractions when LCD is included in \_\_\_\_/5 problems.
- Add fractions when LCD is not included in \_\_\_\_/5 problems.
- Subtract fractions when LCD is included in \_\_\_\_/5 problems.
- Subtract fractions when LCD is not included in \_\_\_\_/5 problems.

## WORD PROBLEMS:

- Solve fifth grade word problems. \_\_\_\_/5

## CLASSROOM WORK:

- Daily assignments done with an average of \_\_\_\_% accuracy.
- Chapter test scores range from \_\_\_\_% to \_\_\_\_% accuracy.

# INFORMAL MATH PROBES – GRADE 5

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

Date: \_\_\_\_\_

## NUMERATION:

Read numbers .001 through 1 billion:

1,739,451,276    0.025    1,107,251,602    122,620,015    0.135    /5

Write numbers .001 through 1 billion:

\_\_\_\_\_ /5

## SUBTRACTION:

Subtract 3 digits from 3 digits with regrouping:

$$\begin{array}{r} \text{a. } 600 \\ - 326 \\ \hline \end{array}$$

$$\begin{array}{r} \text{b. } 700 \\ - 485 \\ \hline \end{array}$$

$$\begin{array}{r} \text{c. } 900 \\ - 671 \\ \hline \end{array}$$

$$\begin{array}{r} \text{d. } 500 \\ - 218 \\ \hline \end{array}$$

$$\begin{array}{r} \text{e. } 300 \\ - 149 \\ \hline \end{array}$$

## MULTIPLICATION:

Multiply 3-digit by 1-digit numbers:

$$\begin{array}{r} \text{a. } 234 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} \text{b. } 376 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} \text{c. } 185 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} \text{d. } 478 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} \text{e. } 167 \\ \times 4 \\ \hline \end{array}$$

Multiply 3-digit number by 2-digit number

$$\begin{array}{r} \text{a. } 486 \\ \times 35 \\ \hline \end{array}$$

$$\begin{array}{r} \text{b. } 493 \\ \times 65 \\ \hline \end{array}$$

$$\begin{array}{r} \text{c. } 786 \\ \times 94 \\ \hline \end{array}$$

$$\begin{array}{r} \text{d. } 639 \\ \times 87 \\ \hline \end{array}$$

$$\begin{array}{r} \text{e. } 793 \\ \times 59 \\ \hline \end{array}$$

Square the following numbers:

2

12

9

10

7

\_\_\_\_\_

## *Multiplication Facts*

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

Time: \_\_\_\_\_ No. Correct: \_\_\_\_/100

8	5	2	3	5	7	9	2	4	6
<u>x 9</u>	<u>x 5</u>	<u>x 2</u>	<u>x 4</u>	<u>x 4</u>	<u>x 6</u>	<u>x 1</u>	<u>x 10</u>	<u>x 3</u>	<u>x 17</u>

5	6	3	3	2	11	5	3	2	6
<u>x 5</u>	<u>x 11</u>	<u>x 4</u>	<u>x 1</u>	<u>x 3</u>	<u>x 0</u>	<u>x 8</u>	<u>x 0</u>	<u>x 1</u>	<u>x 8</u>

5	4	12	10	9	23	2	34	50	11
<u>x 12</u>	<u>x 8</u>	<u>x 5</u>	<u>x 1</u>	<u>x 0</u>	<u>x 8</u>	<u>x 2</u>	<u>x 5</u>	<u>x 6</u>	<u>x 9</u>

3	9	18	47	4	31	2	9	8	7
<u>x 7</u>	<u>x 7</u>	<u>x 1</u>	<u>x 3</u>	<u>x 3</u>	<u>x 5</u>	<u>x 4</u>	<u>x 5</u>	<u>x 4</u>	<u>x 1</u>

5	49	38	22	1	8	17	6	44	26
<u>x 19</u>	<u>x 3</u>	<u>x 2</u>	<u>x 9</u>	<u>x 2</u>	<u>x 10</u>	<u>x 6</u>	<u>x 6</u>	<u>x 2</u>	<u>x 3</u>

18	43	31	48	26	18	25	41	18	27
<u>x 8</u>	<u>x 6</u>	<u>x 7</u>	<u>x 3</u>	<u>x 9</u>	<u>x 7</u>	<u>x 6</u>	<u>x 6</u>	<u>x 9</u>	<u>x 5</u>

33	41	49	27	13	29	47	37	26	15
<u>x 3</u>	<u>x 3</u>	<u>x 4</u>	<u>x 8</u>	<u>x 5</u>	<u>x 8</u>	<u>x 7</u>	<u>x 2</u>	<u>x 0</u>	<u>x 1</u>

25	27	15	34	42	29	18	26	45	39
<u>x 7</u>	<u>x 4</u>	<u>x 0</u>	<u>x 9</u>	<u>x 8</u>	<u>x 9</u>	<u>x 6</u>	<u>x 4</u>	<u>x 3</u>	<u>x 2</u>

49	47	26	35	11	44	27	36	14	42
<u>x 1</u>	<u>x 0</u>	<u>x 2</u>	<u>x 5</u>	<u>x 4</u>	<u>x 6</u>	<u>x 9</u>	<u>x 7</u>	<u>x 4</u>	<u>x 0</u>

28	24	38	17	42	14	39	13	32	24
<u>x 7</u>	<u>x 7</u>	<u>x 8</u>	<u>x 8</u>	<u>x 7</u>	<u>x 8</u>	<u>x 9</u>	<u>x 9</u>	<u>x 7</u>	<u>x 1</u>

## DIVISION

Divide 3-digits by 1-digit with remainders:

$$\overline{4) 291}$$

$$\overline{3) 265}$$

$$\overline{5) 463}$$

$$\overline{8) 299}$$

$$\overline{2) 137}$$

Divide 3-digits by 2-digits with remainders:

$$\overline{42) 293}$$

$$\overline{81) 674}$$

$$\overline{38) 230}$$

$$\overline{79) 524}$$

$$\overline{84) 427}$$

## DECIMALS:

Multiply decimals by natural numbers 1-9:

$$.042 \times 2 =$$

$$.5 \times 6 =$$

$$.25 \times 8 =$$

$$.333 \times 9 =$$

$$.04 \times 1 =$$

Divide decimals by natural numbers 1-9:

$$.5 \div 2 =$$

$$.025 \div 1 =$$

$$.623 \div 5 =$$

$$.75 \div 9 =$$

$$.133 \div 4 =$$

## FRACTIONS

Write in the lowest terms:

$$\frac{5}{10} =$$

$$\frac{6}{8} =$$

$$\frac{4}{16} =$$

$$\frac{3}{18} =$$

$$\frac{2}{12} =$$

## Adding and Subtracting Fractions

Add fractions with Lowest Common Denominator included:

$\frac{1}{4}$	$\frac{1}{12}$	$\frac{3}{10}$	$\frac{3}{14}$	$\frac{4}{15}$
$+\frac{2}{4}$	$+\frac{10}{12}$	$+\frac{5}{10}$	$+\frac{4}{14}$	$+\frac{3}{15}$

Add fractions without Lowest Common Denominator provided:

$\frac{3}{16}$	$\frac{4}{15}$	$\frac{1}{18}$	$\frac{3}{4}$	$\frac{5}{16}$
$+\frac{2}{10}$	$+\frac{3}{9}$	$+\frac{2}{12}$	$+\frac{5}{6}$	$+\frac{2}{6}$

Subtract fractions with Lowest Common Denominator included:

$\frac{8}{9}$	$\frac{7}{10}$	$\frac{9}{12}$	$\frac{11}{15}$	$\frac{6}{11}$
$-\frac{3}{9}$	$-\frac{5}{10}$	$-\frac{4}{12}$	$-\frac{7}{15}$	$-\frac{3}{11}$

Subtract fractions without Lowest Common Denominator provided

$\frac{3}{5}$	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{1}{2}$	$\frac{5}{6}$
$-\frac{1}{3}$	$-\frac{2}{5}$	$-\frac{5}{9}$	$-\frac{2}{13}$	$-\frac{1}{5}$

## Problem Solving

1. The Tasty Tea Company produced 6,792 tea bags one day. If they put 24 tea bags in each box, how many boxes do they need? \_\_\_\_\_
  
2. One truck has 854 cartons of tea to deliver. Another has 783 cartons. How many cartons are to be Delivered in all? \_\_\_\_\_
  
3. There are 2,772 boxes of tea ready to be put into cartons. If there are 12 boxes in a carton, how many cartons are needed? \_\_\_\_\_
  
4. 12 stores ordered a total of 6,300 boxes of tea. If each store ordered the same number of boxes, how many boxes does each receive? \_\_\_\_\_
  
5. A Tasty Tea delivery truck traveled 634 miles one week and 586 miles another week. How much farther did it travel the first week? \_\_\_\_\_