

# INFORMAL MATH PROBES – GRADE 4

\_\_\_\_\_ can correctly

## NUMERATION & PLACE VALUE:

- Read numbers from .01 to 1 million in \_\_\_\_/5 attempts.
- Write numbers from .01 to 1 million in \_\_\_\_/5 attempts.
- Round whole numbers to the nearest thousand in \_\_\_\_/5 attempts.

## ADDITION & SUBTRACTION:

- Add 3 columns of 5 numbers in \_\_\_\_/5 attempts.
- Subtract 4-digit numbers with 0s in the tens and hundreds place in \_\_\_\_/5 attempts.
- Add decimals with the same number of places. \_\_\_\_/5 attempts
- Subtract decimals with the same number of places. \_\_\_\_/5 attempts
- Estimate sums by rounding to the nearest 10 in \_\_\_\_/5 attempts.
- Estimate differences rounding to the nearest hundred in \_\_\_\_/5 attempts.

## MULTIPLICATION:

- Multiplication facts (0-12) with \_\_\_\_% accuracy at rate of \_\_\_\_ facts in \_\_\_\_ minutes, \_\_\_\_ seconds.
- Multiply a 3-digit number by a 1-digit number in \_\_\_\_/5 attempts.
- Multiply a 2-digit number by a 2-digit number in \_\_\_\_/5 attempts.
- Multiply a 3-digit number by a 2-digit number in \_\_\_\_/5 attempts.

## DIVISION:

- Division facts with \_\_\_\_% accuracy at a rate of \_\_\_\_ facts in \_\_\_\_ minutes.
- Divide a 2-digit number by a 1-digit number. \_\_\_\_/5 attempts
- Divide a 3-digit number by a 1-digit number. \_\_\_\_/5 attempts

## PROBLEM SOLVING:

- Solve \_\_\_\_/5 4<sup>th</sup> grade word problems.

## CLASSROOM WORK:

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

Name \_\_\_\_\_ Date \_\_\_\_\_

NUMERATION & PLACE VALUE:

Read numbers from .01 to 1 million:

.5                    115,609            975,254            .75                    698,001

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

Write numbers from .01 to 1 million:

\_\_\_\_\_

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

Round numbers to the nearest thousandth:

6,742            41,256            80,054            10,942            61,545

\_\_\_\_\_

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

ADDITION & SUBTRACTION:

638	217	418	167	822
125	609	117	275	342
812	843	212	317	554
690	701	376	254	822
<u>+123</u>	<u>+245</u>	<u>+532</u>	<u>+256</u>	<u>+372</u>
2388	2615	1655	1269	2912

/5 attempts

5403	2006	8003	6103	3005
- <u>1289</u>	- <u>1127</u>	- <u>3526</u>	- <u>2315</u>	- <u>1259</u>
4114	879	4477	3788	1746

/5 attempts

Add decimals with the same number of places:

.25	.5	.435	.03	.72
<u>+ .26</u>	<u>+ .7</u>	<u>+ .102</u>	<u>+ .25</u>	<u>+ .53</u>
0.51	1.2	0.537	0.28	1.25

/5 attempts

Subtract decimals with the same number of places:

$$\begin{array}{r} .5 \\ - .2 \\ \hline 0.3 \end{array} \quad \begin{array}{r} .752 \\ - .431 \\ \hline 0.321 \end{array} \quad \begin{array}{r} .023 \\ - .011 \\ \hline 0.012 \end{array} \quad \begin{array}{r} .25 \\ - .15 \\ \hline 0.10 \end{array} \quad \begin{array}{r} .3 \\ - .2 \\ \hline 0.1 \end{array} \quad /5 \text{ attempts}$$

**ESTIMATION:**

Estimate sums by rounding to nearest ten.

$$\begin{array}{r} 69 \\ + 22 \\ \hline \end{array} = \begin{array}{r} \underline{70} \\ \underline{20} \\ \hline \end{array}$$

90

$$\begin{array}{r} 66 \\ + 47 \\ \hline \end{array} = \begin{array}{r} \underline{70} \\ \underline{50} \\ \hline \end{array}$$

120

$$\begin{array}{r} \$37.52 \\ + \$22.89 \\ \hline \end{array} = \begin{array}{r} \underline{\$38.00} \\ \underline{\$23.00} \\ \hline \end{array}$$

\$61.00

$$\begin{array}{r} \$126.35 \\ + \$142.66 \\ \hline \end{array} = \begin{array}{r} \underline{\$126.00} \\ \underline{\$143.00} \\ \hline \end{array}$$

\$269.00

$$\begin{array}{r} \$12.76 \\ + \$15.02 \\ \hline \end{array} = \begin{array}{r} \underline{\$13.00} \\ \underline{\$15.00} \\ \hline \end{array}$$

\$28.00

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

Estimate differences rounding to the nearest hundred:

$$\begin{array}{r} 542 \\ - 167 \\ \hline \end{array} = \begin{array}{r} \underline{500} \\ \underline{200} \\ \hline \end{array}$$

300

$$\begin{array}{r} 782 \\ - 276 \\ \hline \end{array} = \begin{array}{r} \underline{800} \\ \underline{300} \\ \hline \end{array}$$

500

$$\begin{array}{r} 921 \\ - 680 \\ \hline \end{array} = \begin{array}{r} \underline{900} \\ \underline{700} \\ \hline \end{array}$$

200

$$\begin{array}{r} \$263.54 \\ - \$167.05 \\ \hline \end{array} = \begin{array}{r} \underline{\$300.00} \\ \underline{\$200.00} \\ \hline \end{array}$$

\$100.00

$$\begin{array}{r} \$725.89 \\ - \$422.35 \\ \hline \end{array} = \begin{array}{r} \underline{\$700.00} \\ \underline{\$400.00} \\ \hline \end{array}$$

\$300.00

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

**MULTIPLICATION:**

Multiply a 3-digit number by a 1-digit number:

$$\begin{array}{r} 267 \\ \times 3 \\ \hline 801 \end{array}$$

$$\begin{array}{r} 173 \\ \times 4 \\ \hline 692 \end{array}$$

$$\begin{array}{r} 485 \\ \times 2 \\ \hline 970 \end{array}$$

$$\begin{array}{r} 196 \\ \times 4 \\ \hline 784 \end{array}$$

$$\begin{array}{r} 247 \\ \times 3 \\ \hline 741 \end{array}$$

/5

Multiply a 2-digit number by a 2-digit number:

$$\begin{array}{r} 39 \\ \times 67 \\ \hline 2613 \end{array}$$

$$\begin{array}{r} 46 \\ \times 58 \\ \hline 2668 \end{array}$$

$$\begin{array}{r} 95 \\ \times 27 \\ \hline 2565 \end{array}$$

$$\begin{array}{r} 84 \\ \times 36 \\ \hline 3024 \end{array}$$

$$\begin{array}{r} 73 \\ \times 49 \\ \hline 3577 \end{array}$$

/5

Multiply a 3-digit number by a 2-digit number:

$$\begin{array}{r} 604 \\ \times 25 \\ \hline 15,100 \end{array}$$

$$\begin{array}{r} 703 \\ \times 68 \\ \hline 47,804 \end{array}$$

$$\begin{array}{r} 807 \\ \times 42 \\ \hline 33,894 \end{array}$$

$$\begin{array}{r} 508 \\ \times 34 \\ \hline 17,272 \end{array}$$

$$\begin{array}{r} 901 \\ \times 78 \\ \hline 70,278 \end{array}$$

/5

**DIVISION:**

Divide a 2-digit number by a 1-digit number:

$$\begin{array}{r} \underline{19} \\ 3 \overline{) 57} \end{array}$$

$$\begin{array}{r} \underline{18} \\ 4 \overline{) 72} \end{array}$$

$$\begin{array}{r} \underline{17} \\ 5 \overline{) 85} \end{array}$$

$$\begin{array}{r} \underline{25} \\ 3 \overline{) 75} \end{array}$$

$$\begin{array}{r} \underline{27} \\ 2 \overline{) 54} \end{array}$$

/5

Divide a 3-digit number by a 1-digit number

$$\begin{array}{r} \underline{82} \\ 3 \overline{) 246} \end{array}$$

$$\begin{array}{r} \underline{32} \\ 4 \overline{) 128} \end{array}$$

$$\begin{array}{r} \underline{41} \\ 5 \overline{) 205} \end{array}$$

$$\begin{array}{r} \underline{71} \\ 6 \overline{) 426} \end{array}$$

$$\begin{array}{r} \underline{81} \\ 7 \overline{) 567} \end{array}$$

# Multiplication Facts

0-9

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 0</u>	<u>x 3</u>	<u>x 7</u>
72	25	4	12	20	42	9	0	12	42

5	6	3	3	2	11	5	3	2	6
<u>x 5</u>	<u>x 1</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>
25	6	12	3	6	0	40	0	2	48

5	4	2	1	9	3	2	4	2	1
<u>x 2</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>
10	32	10	1	0	24	4	20	12	9

3	11	8	7	4	10	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>
21	77	8	21	12	50	8	45	32	7

5	12	8	2	1	8	7	6	4	6
<u>x 9</u>	<u>x 3</u>	<u>x 2</u>	<u>x 9</u>	<u>x 2</u>	<u>x 0</u>	<u>x 6</u>	<u>x 6</u>	<u>x 2</u>	<u>x 3</u>
45	36	16	18	2	0	42	36	8	18

8	3	12	8	6	8	5	12	8	7
<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>
64	18	84	24	54	56	30	72	72	35

3	10	9	7	3	9	7	7	12	5
<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>
9	30	36	56	15	72	49	14	0	5

5	7	5	4	2	9	8	6	5	9
<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>
35	28	0	36	16	81	48	24	15	18

9	7	6	5	12	4	7	6	4	2
<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>
9	0	12	25	48	24	63	42	16	0

8	4	8	7	12	4	10	3	2	4
<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>
56	28	64	56	84	32	90	27	14	4

NAME: \_\_\_\_\_ DATE: \_\_\_\_\_

### DIVISION FACTS

$$\begin{array}{r} \underline{8} \\ 9 \overline{)72} \end{array}$$

$$\begin{array}{r} \underline{6} \\ 7 \overline{)42} \end{array}$$

$$\begin{array}{r} \underline{3} \\ 8 \overline{)24} \end{array}$$

$$\begin{array}{r} \underline{5} \\ 2 \overline{)10} \end{array}$$

$$\begin{array}{r} \underline{1} \\ 4 \overline{)4} \end{array}$$

$$\begin{array}{r} \underline{3} \\ 3 \overline{)9} \end{array}$$

$$\begin{array}{r} \underline{9} \\ 4 \overline{)36} \end{array}$$

$$\begin{array}{r} \underline{8} \\ 1 \overline{)8} \end{array}$$

$$\begin{array}{r} \underline{2} \\ 7 \overline{)14} \end{array}$$

$$\begin{array}{r} \underline{0} \\ 6 \overline{)0} \end{array}$$

$$\begin{array}{r} \underline{3} \\ 7 \overline{)21} \end{array}$$

$$\begin{array}{r} \underline{6} \\ 9 \overline{)54} \end{array}$$

$$\begin{array}{r} \underline{0} \\ 7 \overline{)0} \end{array}$$

$$\begin{array}{r} \underline{2} \\ 8 \overline{)16} \end{array}$$

$$\begin{array}{r} \underline{1} \\ 9 \overline{)9} \end{array}$$

$$\begin{array}{r} \underline{8} \\ 6 \overline{)48} \end{array}$$

$$\begin{array}{r} \underline{7} \\ 8 \overline{)56} \end{array}$$

$$\begin{array}{r} \underline{5} \\ 7 \overline{)35} \end{array}$$

$$\begin{array}{r} \underline{0} \\ 9 \overline{)0} \end{array}$$

$$\begin{array}{r} \underline{5} \\ 6 \overline{)30} \end{array}$$

$$\begin{array}{r} \underline{9} \\ 7 \overline{)63} \end{array}$$

$$\begin{array}{r} \underline{1} \\ 8 \overline{)8} \end{array}$$

$$\begin{array}{r} \underline{5} \\ 9 \overline{)45} \end{array}$$

$$\begin{array}{r} \underline{1} \\ 6 \overline{)6} \end{array}$$

$$\begin{array}{r} \underline{4} \\ 8 \overline{)32} \end{array}$$

$$\begin{array}{r} \underline{4} \\ 5 \overline{)20} \end{array}$$

$$\begin{array}{r} \underline{4} \\ 1 \overline{)4} \end{array}$$

$$\begin{array}{r} \underline{6} \\ 2 \overline{)12} \end{array}$$

$$\begin{array}{r} \underline{7} \\ 5 \overline{)35} \end{array}$$

$$\begin{array}{r} \underline{2} \\ 4 \overline{)8} \end{array}$$

$$\begin{array}{r} \underline{5} \\ 5 \overline{)25} \end{array}$$

$$\begin{array}{r} \underline{5} \\ 1 \overline{)5} \end{array}$$

$$\begin{array}{r} \underline{8} \\ 2 \overline{)16} \end{array}$$

$$\begin{array}{r} \underline{7} \\ 3 \overline{)21} \end{array}$$

$$\begin{array}{r} \underline{3} \\ 4 \overline{)12} \end{array}$$

$$\begin{array}{r} \underline{8} \\ 5 \overline{)40} \end{array}$$

$$\begin{array}{r} \underline{8} \\ 3 \overline{)24} \end{array}$$

$$\begin{array}{r} \underline{6} \\ 1 \overline{)6} \end{array}$$

$$\begin{array}{r} \underline{6} \\ 4 \overline{)24} \end{array}$$

$$\begin{array}{r} \underline{6} \\ 5 \overline{)30} \end{array}$$

NAME: \_\_\_\_\_  
DATE: \_\_\_\_\_

### STORY PROBLEMS – GRADE 4

1. The family drank 18 liters of milk one week.  
They drank 7 liters the next week.  
How many liters did they drink in all? They drank 25 liters in all.
2. There were twenty-one desks in the math class.  
Twenty-seven students came to the class.  
How many more desks were needed to seat the students? 6 desks
3. Wilbur received \$ .45 for mowing the lawn and \$ .85 for painting the dog house. How much did he earn? \$1.30  
How much more does he need to buy a toy truck which costs \$2.85?  
\$1.55
4. The Red Sox scored 18 runs in 6 innings.  
If they scored the same number of runs in each inning, how many runs did they make in each inning? 3 runs in each inning.
5. In basketball, 5 fouls and you're out of the game. Four players were out on fouls. How many fouls were made by these players? 20 fouls were made.