

**BERNARDS TOWNSHIP PUBLIC SCHOOLS  
BASKING RIDGE, NEW JERSEY**

**FRAMEWORK FOR COMPUTATIONAL FLUENCY**

**GRADE 3**

Summer 2008

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In order to develop students' math skills, the mathematics curriculum should include a balance and connection between conceptual understanding and computational fluency. "Fluency refers to having efficient, accurate and generalizable methods (algorithms) for computing that are based on well-understood properties and number relationships" (Principles and Standards for School Mathematics, p.144). Developing a conceptual understanding of mathematical reasoning is essential. Students need to acquire computational fluency in order to be successful problem solvers.

Not all students develop automatic recall of basic facts at the same time. However, teachers should work with students so that each student acquires an understanding of several computational strategies and implements them appropriately with the goal of gaining automaticity with basic facts and computational algorithms. For example, a focus in the primary grades is to master computational fluency with addition and subtraction facts through twenty. Students should develop multiplication and division fact power between third and fourth grade.

Algorithms are important tools that help students become fluent and flexible in computing. In addition to the algorithm instruction provided in *Everyday Mathematics*, students should learn the appropriate "traditional" algorithm. In order to facilitate a smooth articulation of the teaching of the "traditional" algorithms, Grade 2 teachers are responsible for teaching the multi-digit addition algorithm with regrouping, Grade 3 teachers are responsible for teaching the multi-digit subtraction algorithm with regrouping, Grade 4 teachers are responsible for teaching the multi-digit multiplication algorithm, and Grade 5 teachers are responsible for teaching the long division algorithm. Sometimes students bring the "traditional" algorithms from home and introduce them

into the instructional setting at various other times during the course of the school year. Teachers should allow the students to utilize the “traditional” algorithm (even if the timing is not congruent with that listed above) as long as the student demonstrates an understanding of and competency with the algorithm itself. As always, teachers should encourage the students to practice a variety of appropriate computational algorithms as the use of various algorithms will increase the students’ computational fluency. On an individual student basis, teachers can also make suggestions for use of a particular algorithm for those students who appear to lack fluency with computational algorithms.

The *Framework for Computational Fluency (FCF)* provides a variety of materials to use in addition to the materials already provided in *Everyday Mathematics*. Teachers should use the *FCF* book for developing and practicing computational fluency and basic facts prior to accessing other math resources. Teachers can utilize the *FCF* book in a variety of ways. The pages in the booklet are organized by grade level, however teachers are free to use pages from other units or grade levels to differentiate instruction in order to better meet the needs of the learners. The activities in the booklet can be used in place of or along with a Math Message or the Mental Math and Reflexes. They can be used as practice or as assessment, timed or not timed. Teachers are encouraged to present *FCF* worksheets via the Smartboard with students using slates and/or notebooks to record their work. For ease of implementation some of the pages are aligned with the lessons in *Everyday Mathematics*. Each grade level within the *FCF* has a sheet that aligns the *FCF* pages with the *Everyday Mathematics* lessons.

## References

- Bell, J., et al. (2007). *Everyday mathematics the University of Chicago School of Mathematics project: Teacher's lesson guide*. Chicago, IL: McGraw Hill Wright Group.
- National Council of Teachers of Mathematics (NCTM) (2006). *Curriculum focal points for prekindergarten through grade 8 mathematics*. Retrieved July 8, 2008, from <http://www.nctm.org/focalpoints.aspx?linkidentifier=id&itemid=270>
- National Council of Teachers of Mathematics (NCTM) (2000). *Principles and standards for school mathematics*. Reston, VA: The National Council of Teachers of Mathematics, Inc.
- Primary mathematics textbook 1A/B*. (2007). Singapore: Marshall Cavendish Education.
- Primary mathematics textbook 2A/B*. (2007). Singapore: Marshall Cavendish Education.
- Primary mathematics textbook 3A/B*. (2007). Singapore: Marshall Cavendish Education.
- Primary mathematics textbook 4A/B*. (2007). Singapore: Marshall Cavendish Education.
- Primary mathematics textbook 5A/B*. (2007). Singapore: Marshall Cavendish Education.

**Subtraction with and without Regrouping** (use with lesson 2.8 from *Everyday Mathematics*)

**Objectives:** To guide students as they develop strategies for subtraction with and without regrouping; and to encourage using estimation to check if answers are reasonable.

**Key Activities**

Students solve 2-digit subtraction problems, record their work with paper and pencil, and review the counting-up and trade-first subtraction algorithms. Students use ballpark estimates to check whether their answers are reasonable. Students practice using regrouping methods to subtract.

**Key Concepts and Skills**

- Use place-value concepts to apply the counting-up and trade-first algorithms
- Use basic facts to solve extended fact problems involved in trade-first subtraction
- Use base-10 blocks to model and solve subtraction problems.
- Make ballpark estimates as a check for reasonableness of answers

**Key Vocabulary**

Counting-up, trade-first

**Materials**

- Base-10 blocks
  - Number-Grid Poster
  - Student Reference Book
  - Number cards 0 – 9, 4 of each
  - Game master p. 452
  - Pennies or counters
  - Calculator
  - Dice
  - Math Journal 1, p.47 - 50
- and/or**
- Computational Fluency pages 3-10, 3-11, 3-12, 3-13, 3-14, 3-15, 3-16, 3-19, and 3-20
  - Class Data Pad

## Mental Math and Reflexes

Pose pairs of problems similar to the following:

$$\begin{array}{l} 11 - 3 = \\ 61 - 3 = \\ 961 - 3 = \\ 14 - 8 = \\ 62 - 7 = \\ 620 - 70 = \end{array}$$

## Math Message

Solve. Be prepared to tell how you found your answer.

$$\begin{array}{r} 6 \ 2 \\ - \quad 3 \\ \hline \end{array} \quad \begin{array}{r} 5 \ 6 \ 2 \\ - \quad 4 \ 3 \\ \hline \end{array} \quad \begin{array}{r} 3 \ 0 \ 0 \\ - \quad 2 \ 8 \\ \hline \end{array} \quad \begin{array}{r} 5 \ 6 \\ - \quad 2 \ 4 \\ \hline \end{array}$$
  
$$\begin{array}{r} 7 \ 1 \\ - \quad 4 \ 6 \\ \hline \end{array} \quad \begin{array}{r} 4 \ 5 \\ - \quad 1 \ 8 \\ \hline \end{array}$$

## I. Teaching the Lesson

### ➤ Math Message Follow-Up

Have students share and explain their answers. Explain to the class that they will use a new strategy to solve subtraction with regrouping. To support English language learners, discuss the meaning of *counting-up* and *trade-first*.

### ➤ Discussing the Use of Counting-up Method for 2-Digit Subtraction

Students share their answers and procedures while you keep a record on the board or the class data pad. This is called the *counting-up method* because children count up from the smaller number to the larger number, using a combination of multiples of 10s and 1s.

Example:

$$71 - 46 =$$

Write the problem on the board in horizontal form. Write 46 next to the problem. Model counting up from 46 to 71. (See TE pgs. # 143-144) Circle each number as you count up. Remind students that they may begin with the ones, tens, or hundreds in any order when adding mentally. Then model the mental addition of the circled numbers.

$$4 + 10 + 10 + 1 = 25, \text{ so } 71 - 46 = 25.$$

➤ **Subtracting 3-Digit Numbers**

Write the following problem on the board in horizontal format:

$$343 - 158 =$$

Have students solve the problem and share the solution strategies. Model the counting-up method. Remind the students to make ballpark estimates and record their answers in their journal. Provide access to number grids or manipulatives.

➤ **Model the Trade-First Algorithm for 2-Digit Subtraction**

Model solving the problem using the Trade-First Algorithm.

Example:  $71 - 46 =$

Write the problem in vertical format.

Draw a picture on the board of 7 longs and 1 cube to represent the number 71. Ask: *Are there enough blocks to remove 46 (4 longs and 6 cubes)?* Trade 1 long for 10 cubes. Mark the problem to reflect this action. Draw a slash through the 7 and write 6; draw a slash through the 1 and write 11.

Subtract 4 tens by erasing 4 longs from the picture. Subtract 6 ones by erasing 6 cubes from the picture. This leaves 25 (2 longs and 5 cubes).

➤ **Subtracting 3-Digit Numbers**

Write this problem on the board in vertical form:

$$\begin{array}{r} 343 \\ - 158 \\ \hline \end{array}$$

Students should solve the problem and share the solution strategies. Model the Trade-First Method if no one mentions it. Try other problems as needed.

Examples:

$$440 - 107 =$$

$$606 - 263 =$$

$$973 - 238 =$$

$$750 - 724 =$$

$$435 - 72 =$$

$$692 - 576 =$$

$$784 - 39 =$$

➤ **Subtracting 3-Digit Numbers**

Students work independently in their journals completing the subtraction problems. Remind them to make ballpark estimates to check answers and look for mistakes. Have manipulatives available for individual use.

➤ **Games for Differentiation Options**

*Number-Grid Difference*

*Base-10 Trading Game*

Students should continue to practice Regrouping with Subtraction using pages in the Computational Fluency Handbook. Handbook pages may also be sent home as homework.



**Suggested Implementation Guide for Framework for Computational Fluency**  
Teachers should feel free to implement pages at their own professional discretion.

Unit 1: Routines, Review, and Assessment

Lesson	Title	Supplemental Materials
1.1	Numbers and Number Sequences	
1.2	Number Grids	3-2
1.3	Introducing the Student Reference Book	3-2
1.4	Tools for Mathematics	
1.5	Analyzing and Displaying Data	
1.6	Equivalent Names	
1.7	The Language of Chance Events	
1.8	Finding Differences	
1.9	Calculator Routines	
1.10	Money	3-28, 3-29
1.11	Solving Problems with Dollars and Cents	3-28, 3-29
1.12	Patterns	
1.13	The Length-of-Day Project	

Unit 2: Adding and Subtracting Whole Numbers

Lesson	Title	Supplemental Materials
2.1	Fact Families	3-4, 3-12,
2.2	Extensions of Addition and Subtraction Facts	2-2, 3-5, 3-6, 3-7, 3-8, 3-9, 3-10, 3-11, 3-12, 3-13, 3-14, 3-15, 3-16, 3-17
2.3	“What’s My Rule?”	
2.4	Parts-and-Total Number Stories	
2.5	Change Number Stories	3-14, 3-21, 3-27
2.6	Comparison Number Stories	3-14, 3-20, 3-21, 3-27
2.7	The Partial-Sums Algorithm	3-17, 3-18, 3-20
2.8	Subtraction Algorithms	3-13, 3-15, 3-16, 3-17, 3-19, 3-20
2.9	Addition with Three or More Addends	3-7, 3-8, 3-9, 3-12, 3-14, 3-15, 3-17, 3-18, 3-20

### Unit 3: Linear Measures and Area

Lesson	Title	Supplemental Materials
3.1	A “Class Shoe” Unit of Length	
3.2	Measuring with a Ruler	
3.3	Standard Linear Measures	
3.4	Perimeter	
3.5	A Pattern-Block Toss Experiment	
3.6	Exploring Perimeter and Area	
3.7	Area	
3.8	Number Models for Area	
3.9	Diameter and Circumference	

### Unit 4: Multiplication and Division

Lesson	Title	Supplemental Materials
4.1	Multiples of Equal Groups	3-22, 3-23, 3-24
4.2	Multiplication Arrays	3-22, 3-23, 3-24
4.3	Equal Shares and Equal Groups	3-22, 3-23
4.4	Division Ties to Multiplication	3-22, 3-23
4.5	Multiplication Fact Power and Shortcuts	3-22, 3-23, 3-24
4.6	Multiplication and Division Fact Families	3-22, 3-23
4.7	<i>Baseball Multiplication</i>	
4.8	Exploring Arrays and Facts	
4.9	Estimating Distances with a Map Scale	
4.10	A Coin-Toss Experiment	

Unit 5: Place Value in Whole Numbers and Decimals

Lesson	Title	Supplemental Materials
5.1	Place Value Through Ten-Thousands	3-1, 3-1a, 3-2, 3-2a
5.2	Reading, Writing, and Ordering Numbers	3-1, 3-1a, 3-2, 3-3
5.3	Place Value to Millions	
5.4	Application: The U.S. Census	
5.5	Very Large Numbers	
5.6	Exploring Estimates and Polygons	
5.7	Model Decimals with Base-10 Blocks	
5.8	Tenths and Hundredths	
5.9	Tenths and Hundredths of a Meter	
5.10	Application: Rainfall	
5.11	Place Value in Decimals	
5.12	Sunrise-Sunset Line Graphs	

Unit 6: Geometry

Lesson	Title	Supplemental Materials
6.1	Investigating Line Segments, Rays, and Lines	
6.2	Parallel & Intersecting Line Segments, Rays, and Lines	
6.3	Angles and Turns	
6.4	Triangles	
6.5	Quadrangles	
6.6	Polygons	
6.7	Drawing Angles	
6.8	Measuring Angles	
6.9	Symmetry	
6.10	Exploring Congruence, Line Segments, and Decimals	
6.11	Polyhedrons, Part 1	
6.12	Polyhedrons, Part 2	

### Unit 7: Patterns in Products

Lesson	Title	Supplemental Materials
7.1	Patterns in Products	
7.2	Multiplication Facts Survey	
7.3	Fact Power	
7.4	Number Models with Parentheses	
7.5	Scoring in Basketball: An Application	
7.6	Extended Facts: Multiplication and Division	
7.7	Estimating Costs	
7.8	Extended Facts: Products of Tens	
7.9	EXPLORATIONS: Exploring Ratios and Geometric Figures	

### Unit 8: Naming Parts with Fractions

Lesson	Title	Supplemental Materials
8.1	Naming Parts with Fractions	
8.2	Blocks-in-a-Bag Experiment	
8.3	EXPLORATIONS: Exploring Fractions, Re-Forming Squares, and Combinations	
8.4	Number-Line Posters for Fractions	
8.5	Equivalent Fractions	
8.6	Comparing Fractions	
8.7	Fractions Greater than ONE	
8.8	Fractions in Number Stories	

### Unit 9: Multiplication and Division

Lesson	Title	Supplemental Materials
9.1	Multiply and Divide with Multiples of 10, 100, and 1,000	3-25, 3-26
9.2	Using Mental Math to Multiply	3-25, 3-26
9.3	EXPLORATIONS: Exploring Arrays, Areas, and Fractions	
9.4	A Multiplication Algorithm	3-25, 3-26
9.5	Buying at the Stock-Up Sale	
9.6	Factors of a Whole Number	3-24
9.7	Sharing Money	
9.8	Broken-Calculator Division	
9.9	Lattice Multiplication	
9.10	EXPLORATIONS: Exploring Arrays, Equivalent Triangles, and Strength of Paper	
9.11	Products of 2-Digit Numbers, Part 1	3-25, 3-26, 3-26a, 3-27
9.12	Products of 2-Digit Numbers, Part 2	3-25, 3-26, 3-26a, 3-27
9.13	Positive and Negative Numbers	

### Unit 10: Measurement and Data

Lesson	Title	Supplemental Materials
10.1	Review: Length	
10.2	Volume	
10.3	Weight	
10.4	Explorations: Exploring Weight and Volume	
10.5	Capacity	
10.6	The Mean and Median	
10.7	Calculating the Mean	
10.8	Calculator Memory	
10.9	Frequency Distributions	
10.10	Coordinate Grids	

Unit 11: Probability; Year-Long Projects, Revisited

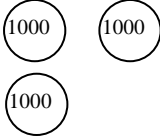
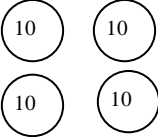
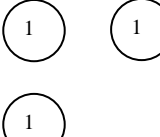
Lesson	Title	Supplemental Materials
11.1	The Length-of-Day Project Revisited	
11.2	National High/Low Temperatures Summaries	
11.3	Spinner Experiments	
11.4	Designing Spinners	
11.5	Using Data to Predict Outcomes	

# Computational Fluency

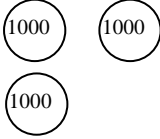
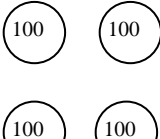
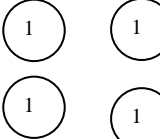
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3 – 1

1. Write the numbers using digits.

Ten thousands	Thousands	Hundreds	Tens	Ones
				

a) The number is \_\_\_\_\_.

Ten thousands	Thousands	Hundreds	Tens	Ones
				

b) The number is \_\_\_\_\_.

2. Arrange the numbers in order from least to greatest.

1792, 9271, 1972, 2971, 7291

## Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

3- 1a

3. Write the following in standard notation.

a) \_\_\_\_\_ One thousand, four hundred two

b) \_\_\_\_\_ Five thousand, seven hundred ninety-three

c) \_\_\_\_\_ Seven thousand, five hundred twelve

d) \_\_\_\_\_ Four thousand, ninety-six

e) \_\_\_\_\_ nine thousand, nine hundred ninety-nine

4. Write the following in words.

a) 2071 \_\_\_\_\_

b) 6214 \_\_\_\_\_

c) 7048 \_\_\_\_\_

d) 6532 \_\_\_\_\_

e) 4600 \_\_\_\_\_

f) 8999 \_\_\_\_\_



## Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

3 – 2

1. Complete the number patterns.

a) 5,342 ; 5,442 ; \_\_\_\_\_ ; 5,642 ; \_\_\_\_\_

b) 5,342 ; 6,342 ; \_\_\_\_\_ ; \_\_\_\_\_ ; 9,342

c) 5,342 ; 5,343 ; 5,344 ; \_\_\_\_\_ ; \_\_\_\_\_

d) 5,342 ; 5,352 ; \_\_\_\_\_ ; 5,372 ; \_\_\_\_\_

2. Write the values of the digits in each of the following numbers using words.

a) 6,529

6 \_\_\_\_\_

5 \_\_\_\_\_

2 \_\_\_\_\_

9 \_\_\_\_\_

b) 4,618

1 \_\_\_\_\_

4 \_\_\_\_\_

8 \_\_\_\_\_

6 \_\_\_\_\_

3. Fill in the blanks.

a)  $4253 = 4000 + 200 + 50 + \underline{\hspace{2cm}}$

b)  $1000 + 800 + 20 + 6 = \underline{\hspace{2cm}}$

c)  $5000 + 70 = \underline{\hspace{2cm}}$

d)  $9000 + \underline{\hspace{2cm}} + 3 = 9053$

e)  $7801 - \underline{\hspace{2cm}} = 7001$

## Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

3 – 2a

4. Fill in the blanks.

a)  $4000 + 300 + 7 =$  \_\_\_\_\_

b)  $5000 + 600 + 40 =$  \_\_\_\_\_

c)  $3000 + 700 + 60 + 8 =$  \_\_\_\_\_

d)  $9000 + 90 =$  \_\_\_\_\_

5. Fill in the blanks.

a) \_\_\_\_\_ is 1000 more than 4628.

b) 2324 is 1000 more than \_\_\_\_\_.

c) \_\_\_\_\_ is 100 less than 9000.

d) 8000 is 100 less than \_\_\_\_\_.

e) 4600 is \_\_\_\_\_ more than 4500.

f) 8400 is \_\_\_\_\_ less than 9400.

g)  $2909 +$  \_\_\_\_\_  $= 3009$

h)  $4830 -$  \_\_\_\_\_  $= 4820$

i) 7,526 is \_\_\_\_\_ more than 7,000.

j) 7,526 is \_\_\_\_\_ more than 526.

## Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

3 – 3

Write the answers on the line.

1. What is the greatest 4-digit number that can be formed using all of the digits 2, 9, 5 and 7? \_\_\_\_\_
2. What is the value of the digit 8 in each of the following using numbers?
  - a) 5832 \_\_\_\_\_
  - b) 2478 \_\_\_\_\_
  - c) 8003 \_\_\_\_\_
  - d) 6589 \_\_\_\_\_
3. The value of the digit 6 in 5629 is \_\_\_\_\_ .
4. In 5029, which digit is in the hundreds place? \_\_\_\_\_
5. Write the missing number in each of the following number patterns
  - a) 997; 998; 999; \_\_\_\_\_; \_\_\_\_\_; \_\_\_\_\_
  - b) 4612; 4622; \_\_\_\_\_; \_\_\_\_\_; 4652
  - c) 4350; 3350; \_\_\_\_\_; 1350
  - d) 3722; 3712; 3702; \_\_\_\_\_
  - e) 8903; \_\_\_\_\_; \_\_\_\_\_; 8873; \_\_\_\_\_

## Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
3 - 4

Add or subtract.

A)  $18 + 2 =$

$2 + 18 =$

$20 - 2 =$

$20 - 18 =$

B)  $34 + 7 =$

$7 + 34 =$

$41 - 7 =$

$41 - 34 =$

C)  $37 + 6 =$

$36 + 7 =$

$43 - 6 =$

$43 - 7 =$

D)  $26 + 8 =$

$28 + 6 =$

$34 - 8 =$

$34 - 6 =$

E)  $54 + 3 =$

$3 + 54 =$

$57 - 3 =$

$57 - 54 =$

F)  $40 + 9 =$

$9 + 40 =$

$49 - 40 =$

$49 - 9 =$

G)  $20 + 5 =$

$5 + 20 =$

$25 - 5 =$

$25 - 20 =$

H)  $13 + 6 =$

$6 + 13 =$

$19 - 6 =$

$19 - 13 =$

# Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
3-5

Add and write the answers in the boxes.

a			b	c		d	
		e		f	g		
	h						i
			j			k	
l		m			n		
o				p			

## ACROSS

a)  $60 + 7 =$

b)  $38 + 11 =$

d)  $64 + 30 =$

f)  $24 + 63 =$

h)  $73 + 17 =$

j)  $55 + 33 =$

k)  $24 + 21 =$

m)  $30 + 33 =$

n)  $25 + 51 =$

o)  $4 + 91 =$

p)  $23 + 41 =$

## DOWN

a)  $62 + 3 =$

c)  $96 + 2 =$

e)  $26 + 34 =$

g)  $61 + 15 =$

i)  $44 + 53 =$

k)  $63 + 22 =$

m)  $61 + 22 =$

o)  $14 + 32 =$

p)  $37 + 32 =$

r)  $31 + 43 =$

# Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
3-6

Add.

$$\begin{array}{r} \text{A.} \quad 5 \ 2 \\ + 2 \ 9 \\ \hline \end{array}$$

$$\begin{array}{r} \text{B.} \quad 5 \ 7 \\ + 3 \ 5 \\ \hline \end{array}$$

$$\begin{array}{r} \text{C.} \quad 3 \ 5 \\ + 4 \ 8 \\ \hline \end{array}$$

$$\begin{array}{r} \text{D.} \quad 3 \ 5 \\ + 4 \ 7 \\ \hline \end{array}$$

$$\begin{array}{r} \text{E.} \quad 4 \ 3 \\ + 4 \ 8 \\ \hline \end{array}$$

$$\begin{array}{r} \text{F.} \quad 6 \ 9 \\ + 1 \ 6 \\ \hline \end{array}$$

$$\begin{array}{r} \text{G.} \quad 4 \ 6 \\ + 4 \ 8 \\ \hline \end{array}$$

$$\begin{array}{r} \text{H.} \quad 4 \ 6 \\ + 3 \ 4 \\ \hline \end{array}$$

$$\begin{array}{r} \text{I.} \quad 5 \ 1 \\ + 1 \ 9 \\ \hline \end{array}$$

# Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
3-7

Add.

$$\begin{array}{r} \text{C.} \quad 783 \\ + \quad 47 \\ \hline \end{array}$$

$$\begin{array}{r} \text{N.} \quad 276 \\ + \quad 79 \\ \hline \end{array}$$

$$\begin{array}{r} \text{E.} \quad 902 \\ + \quad 89 \\ \hline \end{array}$$

$$\begin{array}{r} \text{O.} \quad 326 \\ + \quad 67 \\ \hline \end{array}$$

$$\begin{array}{r} \text{I.} \quad 378 \\ + \quad 295 \\ \hline \end{array}$$

$$\begin{array}{r} \text{W.} \quad 361 \\ + \quad 289 \\ \hline \end{array}$$

$$\begin{array}{r} \text{R.} \quad 667 \\ + \quad 635 \\ \hline \end{array}$$

$$\begin{array}{r} \text{K.} \quad 794 \\ + \quad 268 \\ \hline \end{array}$$

Write each letter with an animal to check the answers.



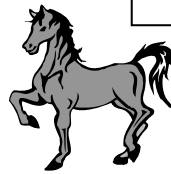
355

\_\_\_\_\_



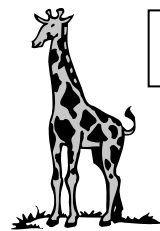
673

\_\_\_\_\_



830

\_\_\_\_\_



991



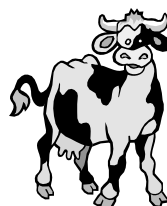
650

\_\_\_\_\_



393

\_\_\_\_\_



1,302

\_\_\_\_\_

1,062

\_\_\_\_\_



# Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
3-8

Add.

$$\begin{array}{r} 1. \quad 554 \\ + \quad 48 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 486 \\ + \quad 84 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 895 \\ + \quad 79 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 573 \\ + \quad 279 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 708 \\ + \quad 792 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 537 \\ + \quad 287 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 736 \\ + \quad 298 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 249 \\ + \quad 746 \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 697 \\ + \quad 554 \\ \hline \end{array}$$



# Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
3-9

Add.

$$\begin{array}{r} 1. \quad 230 \\ + 97 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 124 \\ + 280 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 384 \\ + 417 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 730 \\ + 311 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 625 \\ + 183 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 420 \\ + 83 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 668 \\ + 475 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 746 \\ + 44 \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 941 \\ + 39 \\ \hline \end{array}$$

# Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

3-10

Subtract and write the answers in the boxes.

	a	b		c	d
e		f	g		
h	i		j	k	
				l	m
n		o			
p				q	

## ACROSS

a)  $96 - 31 =$

c)  $55 - 21 =$

f)  $38 - 5 =$

h)  $47 - 20 =$

j)  $26 - 12 =$

l)  $98 - 10 =$

o)  $85 - 65 =$

p)  $67 - 31 =$

q)  $55 - 53 =$

## DOWN

b)  $85 - 32 =$

d)  $57 - 14 =$

e)  $78 - 36 =$

g)  $34 - 3 =$

i)  $89 - 17 =$

k)  $99 - 51 =$

m)  $87 - 2 =$

n)  $95 - 42 =$

# Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
3-11

Subtract.

$$\begin{array}{r} \text{C.} \quad 53 \\ - 47 \\ \hline \end{array}$$

$$\begin{array}{r} \text{D.} \quad 64 \\ - 38 \\ \hline \end{array}$$

$$\begin{array}{r} \text{E.} \quad 73 \\ - 56 \\ \hline \end{array}$$

$$\begin{array}{r} \text{I.} \quad 93 \\ - 47 \\ \hline \end{array}$$

$$\begin{array}{r} \text{M.} \quad 69 \\ - 48 \\ \hline \end{array}$$

$$\begin{array}{r} \text{N.} \quad 55 \\ - 49 \\ \hline \end{array}$$

$$\begin{array}{r} \text{O.} \quad 57 \\ - 19 \\ \hline \end{array}$$

$$\begin{array}{r} \text{S.} \quad 77 \\ - 49 \\ \hline \end{array}$$

$$\begin{array}{r} \text{T.} \quad 84 \\ - 56 \\ \hline \end{array}$$

Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
3-12

Complete the number sentences.

- 1.
- |                  |                  |
|------------------|------------------|
| a) $3867 + 1 =$  | b) $3867 + 2 =$  |
| c) $3867 + 10 =$ | d) $3867 + 20 =$ |
| e) $3867 - 1 =$  | f) $3867 - 2 =$  |
| g) $3867 - 10 =$ | h) $3867 - 20 =$ |

- 2.
- |                  |                  |
|------------------|------------------|
| a) $8925 + 1 =$  | b) $8925 + 2 =$  |
| c) $8925 + 10 =$ | d) $8925 + 20 =$ |
| e) $8925 - 1 =$  | f) $8925 - 2 =$  |
| g) $8925 - 10 =$ | h) $8925 - 20 =$ |

- 3.
- |                  |                  |
|------------------|------------------|
| a) $4308 + 1 =$  | b) $4308 + 2 =$  |
| c) $4308 + 10 =$ | d) $4308 + 20 =$ |
| e) $4308 - 1 =$  | f) $4308 - 2 =$  |
| g) $4308 - 10 =$ | h) $4308 - 20 =$ |

# Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
3-13

Subtract.

$$\begin{array}{r} \text{M.} \quad 841 \\ - \quad 69 \\ \hline \end{array}$$

$$\begin{array}{r} \text{L.} \quad 943 \\ - \quad 85 \\ \hline \end{array}$$

$$\begin{array}{r} \text{T.} \quad 733 \\ - \quad 29 \\ \hline \end{array}$$

$$\begin{array}{r} \text{E.} \quad 470 \\ - \quad 395 \\ \hline \end{array}$$

$$\begin{array}{r} \text{A.} \quad 616 \\ - \quad 377 \\ \hline \end{array}$$

$$\begin{array}{r} \text{N.} \quad 845 \\ - \quad 596 \\ \hline \end{array}$$

$$\begin{array}{r} \text{H.} \quad 913 \\ - \quad 448 \\ \hline \end{array}$$

$$\begin{array}{r} \text{A.} \quad 716 \\ - \quad 477 \\ \hline \end{array}$$

$$\begin{array}{r} \text{R.} \quad 632 \\ - \quad 475 \\ \hline \end{array}$$

Write the letters in the boxes below to find the message.

858	75	239	157	249

772	239	705	465

## Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
3-14

Add or subtract.

$$\begin{array}{r} 1. \quad 509 \\ + 363 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 436 \\ + 244 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 700 \\ + 275 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 715 \\ - 225 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 600 \\ - 142 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 503 \\ - 153 \\ \hline \end{array}$$

7. David paid \$750 for a new TV. He had \$350 left. How much money did he have before he bought the TV?

8. Lucy has 850 stickers. Her brother has 177 stickers fewer than Lucy. How many stickers does her brother have? How many stickers do they have altogether?

9. 429 baseball cards were sold on Saturday. 64 more cards were sold on Sunday, than on Saturday. How many cards were sold on Sunday?

# Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
3-15



Subtract.

$$\begin{array}{r} 1. \quad 420 \\ - 179 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 625 \\ - 428 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 618 \\ - 349 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 742 \\ - 373 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 434 \\ - 129 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 343 \\ - 155 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 846 \\ - 769 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 947 \\ - 869 \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 763 \\ - 268 \\ \hline \end{array}$$

# Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
3-16

Subtract.

1.

$$\begin{array}{r} 410 \\ - 279 \\ \hline \end{array}$$

2.

$$\begin{array}{r} 515 \\ - 228 \\ \hline \end{array}$$



3.

$$\begin{array}{r} 742 \\ - 374 \\ \hline \end{array}$$

4.

$$\begin{array}{r} 434 \\ - 159 \\ \hline \end{array}$$

5.

$$\begin{array}{r} 552 \\ - 165 \\ \hline \end{array}$$

6.

$$\begin{array}{r} 656 \\ - 568 \\ \hline \end{array}$$

7.

$$\begin{array}{r} 927 \\ - 779 \\ \hline \end{array}$$

8.

$$\begin{array}{r} 642 \\ - 177 \\ \hline \end{array}$$



# Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
3-17

Add or Subtract.



$$\begin{array}{r} 1. \quad 317 \\ + 249 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 462 \\ + 94 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 478 \\ + 793 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 958 \\ + 543 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 695 \\ - 225 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 410 \\ - 384 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 503 \\ - 048 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 602 \\ - 159 \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 462 \\ + 379 \\ \hline \end{array}$$

# Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
3-18

Add.

$$\begin{array}{r} \text{A.} \quad 4 \ 6 \ 9 \ 7 \\ + \ 1 \ 3 \ 0 \ 5 \\ \hline \end{array}$$

$$\begin{array}{r} \text{B.} \quad 3 \ 7 \ 6 \ 2 \\ + \ 5 \ 1 \ 4 \ 8 \\ \hline \end{array}$$

$$\begin{array}{r} \text{C.} \quad 4 \ 6 \ 5 \ 3 \\ + \ 2 \ 7 \ 2 \ 9 \\ \hline \end{array}$$

$$\begin{array}{r} \text{D.} \quad 2 \ 8 \ 2 \ 4 \\ + \ 2 \ 5 \ 7 \ 6 \\ \hline \end{array}$$

$$\begin{array}{r} \text{E.} \quad 2 \ 9 \ 0 \ 8 \\ + \ 6 \ 8 \ 9 \ 2 \\ \hline \end{array}$$

$$\begin{array}{r} \text{F.} \quad 6 \ 9 \ 4 \ 2 \\ + \ 1 \ 0 \ 9 \ 3 \\ \hline \end{array}$$

$$\begin{array}{r} \text{G.} \quad 5 \ 4 \ 7 \ 1 \\ + \ 7 \ 8 \ 4 \\ \hline \end{array}$$

$$\begin{array}{r} \text{H.} \quad 7 \ 2 \ 4 \ 6 \\ + \ 8 \ 4 \ 4 \\ \hline \end{array}$$

$$\begin{array}{r} \text{I.} \quad 4 \ 1 \ 9 \ 0 \\ + \ 6 \ 2 \ 9 \\ \hline \end{array}$$

# Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
3 - 19

Subtract.

$$\begin{array}{r} \text{A.} \quad 6847 \\ - \quad \quad 6 \\ \hline \end{array}$$

$$\begin{array}{r} \text{B.} \quad 6847 \\ - \quad \quad 30 \\ \hline \end{array}$$

$$\begin{array}{r} \text{C.} \quad 6847 \\ - \quad 600 \\ \hline \end{array}$$

$$\begin{array}{r} \text{D.} \quad 6847 \\ - 3000 \\ \hline \end{array}$$

$$\begin{array}{r} \text{E.} \quad 6847 \\ - \quad 523 \\ \hline \end{array}$$

$$\begin{array}{r} \text{F.} \quad 6847 \\ - 4523 \\ \hline \end{array}$$

$$\begin{array}{r} \text{G.} \quad 5243 \\ - 2787 \\ \hline \end{array}$$

$$\begin{array}{r} \text{H.} \quad 9564 \\ - 8367 \\ \hline \end{array}$$

$$\begin{array}{r} \text{I.} \quad 2435 \\ - 1267 \\ \hline \end{array}$$

## Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

3 - 20

Add or Subtract.

$$\begin{array}{r} 1. \quad 4339 \\ + 5450 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 8000 \\ - 3406 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 7804 \\ - 6935 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 4975 \\ + 1928 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 2446 \\ + 6576 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 7173 \\ - 3654 \\ \hline \end{array}$$

7. A restaurant sold 957 hamburgers and 1238 cheeseburgers. How many burgers were sold altogether?
  
  
  
  
  
  
  
  
  
  
8. Mrs. Smith earned \$3265. Mr. Smith earned \$2955. How much more money did Mrs. Smith earn than Mr. Smith?
  
  
  
  
  
  
  
  
  
  
9. There were 2055 people at the Bridgewater Sports Arena hockey game. 1637 were children. How many adults were at the game?

## Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
3 - 21

Write the answers on the line.

1. Mr. Brown collected 1930 chicken eggs. He collected 859 fewer duck eggs than chicken eggs. How many eggs did he collect altogether?
2. 6700 students took part in field day competitions. 2680 of them were boys. How many girls were there?
3. The chef made 1050 chicken kabobs and 950 beef kabobs. He served 1765 kabobs at the restaurant. How many kabobs were left?
4. Tommy earned \$3915. He spent \$1268 on food and \$1490 on rent and transportation. How much money will he have to save in the bank?
5. The refrigerator costs \$1739. An oven is \$850 cheaper than the refrigerator. Mrs. Jones buys both the refrigerator and the oven. How much does she pay?
6. Linda had \$2467 in a bank. She deposited another \$133. How much more money must she deposit if she wants to have \$3000 in the bank?
7. There are 4608 marchers in a parade. 2745 of them are men. 855 are women. The rest are children. How many children are there?
8. Amy saved \$1035. Julie saved \$278 more than Amy. Kathy saved \$105 less than Julie. How much did Kathy save?

## Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
3-22

Find the value of each of the following:

- | (a)               | (b)           | (c)             | (d)            |
|-------------------|---------------|-----------------|----------------|
| 1. $4 \times 3 =$ | $16 \div 2 =$ | $0 \times 4 =$  | $50 \div 10 =$ |
| 2. $5 \times 6 =$ | $21 \div 3 =$ | $2 \times 10 =$ | $0 \div 4 =$   |
| 3. $7 \times 0 =$ | $36 \div 4 =$ | $4 \times 9 =$  | $18 \div 2 =$  |

4. Noel bought 3 packets of gum. There are 8 pieces of gum in each packet. How many pieces of gum are there altogether?
5. Sean arranged 24 cars in 4 rows. There are equal numbers of cars in each row. How many cars are in each row?
6. Marcy saved \$5 a week for 10 weeks. How much money did she save?
7. Tony paid \$18 for 3 boxes of cereal. How much did each box of cereal cost?
8. Sean baked 6 cakes. He put 10 Hershey kisses on each cake. How many Hershey kisses did he use?
9. Dave bought 4 pineapples for \$3 each. How much did they cost?
10. The classroom had 27 desks. There are 3 cleaning people working on the desks. How many desks did each person clean?
11. 3 students made 24 cards for the VA hospital. Each student made the same number of cards. How many cards did each student make?

## Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
3-23

Find the value of each of the following:

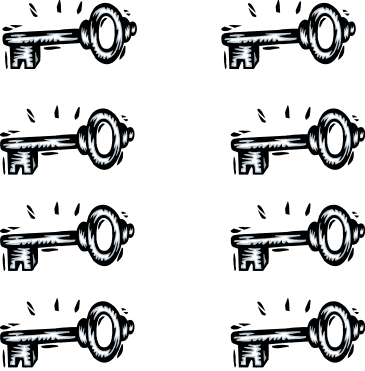

- | (a)               | (b)            | (c)             | (d)           |
|-------------------|----------------|-----------------|---------------|
| 1. $6 \times 2 =$ | $24 \div 3 =$  | $2 \times 7 =$  | $32 \div 4 =$ |
| 2. $7 \times 3 =$ | $14 \div 2 =$  | $5 \times 8 =$  | $30 \div 5 =$ |
| 3. $3 \times 6 =$ | $16 \div 4 =$  | $4 \times 8 =$  | $28 \div 4 =$ |
| 4. $7 \times 5 =$ | $80 \div 10 =$ | $10 \times 2 =$ | $36 \div 4 =$ |

5. There are 5 rows of chairs. There are 30 chairs altogether. How many chairs in each row?
6. The remote car costs \$7. The toy train costs 4 times as much as the car. What does the train cost?
7. Megan went to Old Navy and bought 8 pairs of shorts for \$10 each. How much did she spend?
8. Sonya weighs 32 pounds. She is 4 times as heavy as her sister. How much does her sister weigh?
9. Sam bought 4 boxes of pens for school. There are 5 blue pens and 3 red pens in each box. How many pens are in each box? How many pens did she buy altogether?
10. The teacher corrected 5 sets of 8 journals in the morning. She corrected 30 journals in the afternoon. How many journals did she correct in the morning? How many journals did she correct altogether?

Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
3-24

1. Find the missing factors.

<p>a) </p> <p>4 x _____ = 8</p>	<p>b) </p> <p>_____ x 5 = 15</p>
<p>c) 7 x _____ = 56</p>	<p>d) 4 X _____ = 32</p>
<p>e) 5 x _____ = 45</p>	<p>f) 6 X _____ = 42</p>
<p>g) _____ x 6 = 54</p>	<p>h) _____ x 9 = 27</p>
<p>i) _____ x 7 = 70</p>	<p>j) _____ x 8 = 64</p>

2. Fill in the blanks.

a)  $8 = 1 \times$  \_\_\_\_\_

$8 = 2 \times$  \_\_\_\_\_

The factors of 8 are \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.

b)  $15 = 1 \times$  \_\_\_\_\_

$15 = 3 \times$  \_\_\_\_\_

The factors of 15 are \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.



## Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

3-25

$$\begin{array}{r} 4 \\ X 3 \\ \hline 12 \end{array}$$
$$\begin{array}{r} 40 \\ X 3 \\ \hline 120 \end{array}$$
$$\begin{array}{r} 400 \\ X 3 \\ \hline 1200 \end{array}$$

12 ones

12 tens = 120

12 hundreds = 1200

Find the value of each of the following:

- | (a)                | (b)             | (c)              | (d)              |
|--------------------|-----------------|------------------|------------------|
| 1. $20 \times 8 =$ | $4 \times 80 =$ | $3 \times 500 =$ | $300 \times 5 =$ |
| 2. $30 \times 6 =$ | $7 \times 10 =$ | $4 \times 500 =$ | $200 \times 5 =$ |
| 3. $40 \times 6 =$ | $5 \times 60 =$ | $2 \times 600 =$ | $700 \times 4 =$ |
| 4. $20 \times 5 =$ | $3 \times 40 =$ | $1 \times 800 =$ | $500 \times 3 =$ |
| 5. $22 \times 3 =$ | $72 \times 4 =$ | $42 \times 5 =$  | $68 \times 2 =$  |
| 6. $2 \times 39 =$ | $4 \times 34 =$ | $3 \times 75 =$  | $5 \times 43 =$  |

7. Barnes and Nobles sold 30 books in the morning. In the afternoon, they sold 8 times as many books as the morning. How many books did they sell during the afternoon? How many books did they sell during the day?
8. There are 5 shelves of books. There are 56 books on each shelf. How many books are on the shelves?
9. Margaret bought 4 pairs of shoes for \$38 each. How much did she pay for the shoes?
10. Matthew collected 76 baseball cards. Troy collected 3 times as many as Matthew. How many cards does Troy have?

## Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
3-26

Find the value of each of the following:

- | (a)                 | (b)              | (c)              | (d)              |
|---------------------|------------------|------------------|------------------|
| 1. $200 \times 8 =$ | $4 \times 312 =$ | $3 \times 419 =$ | $350 \times 5 =$ |
| 2. $302 \times 6 =$ | $7 \times 508 =$ | $4 \times 625 =$ | $292 \times 5 =$ |
| 3. $416 \times 6 =$ | $5 \times 432 =$ | $2 \times 781 =$ | $723 \times 4 =$ |
| 4. $800 \times 5 =$ | $3 \times 506 =$ | $4 \times 439 =$ | $556 \times 3 =$ |
| 5. $249 \times 3 =$ | $7 \times 361 =$ | $4 \times 968 =$ | $704 \times 2 =$ |

6. There are 144 pens in one gross. How many pens are in 3 gross?
7. The cell phone costs \$262. The TV costs 4 times as much as the cell phone. How much does the TV cost?
8. Debbie bought 3 boxes of beads. There are 260 beads in each box. How many beads did she buy?
9. If one package of cookies weighs 250 grams, what is the total weight of five packages of cookies?
10. The farmer sold 680 eggs last week. He sold 4 times as many eggs this week as last week. How many eggs did he sell altogether?
11. The rice cooker costs \$150. The refrigerator costs 5 times as much as the rice cooker. What is the total cost of the rice cooker and the refrigerator?

## Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
3-26a

12. Kim made 280 chocolate truffles for her store. She made 3 times as many chocolate covered Oreos as the truffles. How many chocolate covered Oreos did she make?
13. There are 365 days in a year. How many days are in 6 years?
14. A pilot flies 105 days each year. How many days will he fly in 5 years?
15. One box of candy weighs 350 grams. Find the total weight of 2 boxes of candy.
16. Monica bought 4 boxes of cookies. There are 30 cookies in each box. How much did she pay for the cookies if each cookie costs \$3?
17. In the Ridge auditorium, there are 18 seats in the first row. The next 5 rows each have 25 seats. How many seats are in these 6 rows altogether?

## Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
3-27

Find the value of each of the following:

- |    | (a)             | (b)              | (c)              |
|----|-----------------|------------------|------------------|
| 1. | $1672 + 298 =$  | $3988 + 1479 =$  | $806 + 9194 =$   |
| 2. | $3941 - 296 =$  | $4732 - 2415 =$  | $5000 - 2999 =$  |
| 3. | $43 \times 7 =$ | $205 \times 7 =$ | $489 \times 7 =$ |
4. 1628 girls and 1092 boys took part in an art competition. How many students took part altogether?
5. There were 4555 concert tickets for sale on Monday. At the end of the day, 1989 tickets were sold. How many tickets will they have to sell on Tuesday morning?
6. There are 480 gallons of oil in each drum. How many gallons are in 5 drums?
7. The children's library has 1072 books. 650 are checked out. 225 of the books left are picture books. How many chapter books are left?
8. Marty has 3 times as much money as Robert. Robert has \$240. How much money does Marty have? How much do they have altogether?

## Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
3-28

### 1. Add

a.  $\$26.20 + \$13.58 =$

b.  $\$39.55 + \$60.45 =$

c.  $\$48.60 + \$27.30 =$

d.  $\$15.45 + \$27.95 =$

e.  $\$68.55 + \$25.40 =$

f.  $\$34.55 + \$56.45 =$

### 2. Subtract

a.  $\$36.90 - \$15.35 =$

b.  $\$60.50 - \$24.45 =$

c.  $\$53.20 - \$30.80 =$

d.  $\$40.25 - \$15.30 =$

e.  $\$72.40 - \$26.95 =$

f.  $\$64.00 - \$31.85 =$

3. Sandy spent \$24.60. He had \$76.40 left. How much money did he have at first?

4. Patty wants to buy an outfit that costs \$62.50. She only has \$48.60. How much more does she need to buy the outfit?

5. The bakery cake costs \$16.80. The ice cream cake costs \$5.60 more than the bakery cake. What is the cost for the ice cream cake?

6. Doug has \$10. His lunch cost \$6.95. How much does he have left?

7. A shirt and pants cost \$42.50. The shirt costs \$16.85. How much is the cost for the pants?

8. Emmy had \$40.55. She bought a book for \$15.85 and markers for \$6.80. How much money does she have left?

## Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
3-29

Find the value of each of the following:

(a)

1.  $\$14.85 + \$26.25 =$

2.  $\$29.75 + \$0.85 =$

3.  $\$60.70 + \$59.30 =$

4.  $\$34.55 + \$28.85 =$

5.  $\$75.95 + \$26.95 =$

(b)

$\$25.50 - \$22.35 =$

$\$42.65 - \$16.75 =$

$\$40.00 - \$31.05 =$

$\$37.05 - \$33.95 =$

$\$65.25 - \$35.95 =$

6. The field hockey stick costs \$15.90. The ice hockey stick costs \$42.50. How much cheaper is the field hockey stick than the ice hockey stick?

7. The radio regular price is \$53. It is \$29.95 on sale. How much cheaper is the sale price than the regular price?

8. Kaitie had \$10.80. Her mother gave her some allowance money. Now she has \$12.30. How much money did her mom give her?

9. Morgan bought vegetables for \$2.40 and fruit for \$3.70. She had \$21.30 left. How much did she have at first?

10. David bought a sandwich and a milkshake. The milkshake cost \$5.50. The sandwich cost \$1.95 more than the milkshake. How much did the sandwich cost? How much did he spend altogether?

# Computational Fluency Answer Key

## Grade 3

<p><u>3-1</u> 1.a) 3,043 b) 3,405</p> <p>2. 1792, 1972, 2971, 7291, 9271</p>	<p><u>3-1a</u> 3. a) 1,402 b) 5, 793 c) 7,512 d) 4,096 e) 9,999</p> <p>4. a) Two Thousand, Seventy-One b) Six Thousand, Two Hundred Fourteen c) Seven Thousand, Forty-eight d) Six Thousand, Five Hundred, Thirty-Two e) Four Thousand, Six Hundred f) Eight Thousand, Nine Hundred Ninety-Nine</p>	<p><u>3-2</u> 1.a) 5,542, 5,742 b) 7,342, 8,342 c) 5,345, 5,346 d) 5,362, 5,382</p> <p>2.a) 6 Thousand, 5 Hundred 2 Tens 9 Ones b) 1 Ten 4 Thousands 8 Ones 6 Hundreds</p> <p>3.a) 3 b) 1,826 c) 5,070 d) 50 e) 800</p>
<p><u>3-2a</u> 4. a) 4,307 b) 5,640 c) 3,768 d) 9,090</p> <p>5. a) 5,628 b) 1,324 c) 8,900 d) 8,100 e) 100 f) 1,000 g) 100 h) 10 i) 526 j) 7,000</p>	<p><u>3-3</u> 1. 9,752 2.a) 800 b) 8 c) 8,000 d) 80</p> <p>3. 600 4. 0</p> <p>5.a) 1,000, 1,001, 1002 b) 4,632, 4,642 c) 2,350 d) 3,792 e) 8,893, 8,883, 8,863</p>	<p><u>3-4</u> a) 20, 20, 18, 2 b) 41, 41, 34, 7 c) 43, 43, 37, 36 d) 34, 34, 26, 28 e) 57, 57, 54, 3 f) 49, 49, 9, 40 g) 25, 25, 20, h) 19, 19, 13, 6</p>
<p><u>3-5</u> Across a) 67 b) 49 d) 94 f) 87 h) 90 j) 88 k) 45 m) 63 n) 76 o) 95 p) 64</p> <p>Down a) 65 c) 98 e) 60 g) 76 h) 97 i) 85 j) 83 k) 46 l) 69 n) 74</p>	<p><u>3-6</u> a. 81 b. 92 c) 83 d) 82 e) 91 f) 85 g) 94 h) 80 i) 70</p>	<p><u>3-7</u> c. 830 n. 355 e. 991 o. 393 l. 673 w. 650 r. 1,302 k. 1,062</p> <p>NICE WORK</p>

# Computational Fluency Answer Key

## Grade 3

<p><u>3-8</u></p> <ol style="list-style-type: none"> <li>1. 602</li> <li>2. 570</li> <li>3. 974</li> <li>4. 852</li> <li>5. 1,500</li> <li>6. 824</li> <li>7. 1,034</li> <li>8. 995</li> <li>9. 1,251</li> </ol>	<p><u>3-9</u></p> <ol style="list-style-type: none"> <li>1. 327</li> <li>2. 404</li> <li>3. 801</li> <li>4. 1,041</li> <li>5. 808</li> <li>6. 503</li> <li>7. 1,143</li> <li>8. 790</li> <li>9. 980</li> </ol>	<p><u>3-10</u></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Across</td> <td style="width: 50%;">Down</td> </tr> <tr> <td>a) 65</td> <td>b) 53</td> </tr> <tr> <td>c) 34</td> <td>d) 43</td> </tr> <tr> <td>f) 33</td> <td>e) 42</td> </tr> <tr> <td>h) 27</td> <td>g) 31</td> </tr> <tr> <td>j) 14</td> <td>i) 72</td> </tr> <tr> <td>l) 88</td> <td>k) 48</td> </tr> <tr> <td>o) 20</td> <td>m) 85</td> </tr> <tr> <td>p) 36</td> <td>n) 53</td> </tr> <tr> <td>q) 2</td> <td></td> </tr> </table>	Across	Down	a) 65	b) 53	c) 34	d) 43	f) 33	e) 42	h) 27	g) 31	j) 14	i) 72	l) 88	k) 48	o) 20	m) 85	p) 36	n) 53	q) 2	
Across	Down																					
a) 65	b) 53																					
c) 34	d) 43																					
f) 33	e) 42																					
h) 27	g) 31																					
j) 14	i) 72																					
l) 88	k) 48																					
o) 20	m) 85																					
p) 36	n) 53																					
q) 2																						
<p><u>3-11</u></p> <p>c. 6</p> <p>d. 26</p> <p>e. 17</p> <p>l. 46</p> <p>m. 21</p> <p>n. 6</p> <p>o. 38</p> <p>s. 28</p> <p>t. 28</p>	<p><u>3-12</u></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">1.a) 3,868</td> <td style="width: 50%;">2. a) 8,926</td> </tr> <tr> <td>b) 3,869</td> <td>b) 8,927</td> </tr> <tr> <td>c) 3,877</td> <td>c) 8,935</td> </tr> <tr> <td>d) 3,887</td> <td>d) 8,945</td> </tr> <tr> <td>e) 3,866</td> <td>e) 8,924</td> </tr> <tr> <td>f) 3,865</td> <td>f) 8,923</td> </tr> <tr> <td>g) 3,857</td> <td>g) 8,915</td> </tr> <tr> <td>h) 3,847</td> <td>h) 8,905</td> </tr> </table> <p>3. a) 4,309</p> <p>b) 4,310</p> <p>c) 4,318</p> <p>d) 4,328</p> <p>e) 4,307</p> <p>f) 4,306</p> <p>g) 4,298</p> <p>h) 4,288</p>	1.a) 3,868	2. a) 8,926	b) 3,869	b) 8,927	c) 3,877	c) 8,935	d) 3,887	d) 8,945	e) 3,866	e) 8,924	f) 3,865	f) 8,923	g) 3,857	g) 8,915	h) 3,847	h) 8,905	<p><u>3-13</u></p> <p>m.772</p> <p>l.858</p> <p>t.704</p> <p>e.75</p> <p>a.239</p> <p>n.249</p> <p>h. 465</p> <p>a.239</p> <p>r.157</p> <p style="text-align: center;">LEARN MATH</p>				
1.a) 3,868	2. a) 8,926																					
b) 3,869	b) 8,927																					
c) 3,877	c) 8,935																					
d) 3,887	d) 8,945																					
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g) 3,857	g) 8,915																					
h) 3,847	h) 8,905																					
<p><u>3-14</u></p> <ol style="list-style-type: none"> <li>1. 872</li> <li>2. 680</li> <li>3. 975</li> <li>4. 490</li> <li>5. 458</li> <li>6. 350</li> <li>7. \$1,100</li> <li>8. 673 Stickers 152 Stickers 493 Cards</li> </ol>	<p><u>3-15</u></p> <ol style="list-style-type: none"> <li>1. 241</li> <li>2. 197</li> <li>3. 269</li> <li>4. 369</li> <li>5. 305</li> <li>6. 188</li> <li>7. 77</li> <li>8. 78</li> <li>9. 495</li> </ol>	<p><u>3-16</u></p> <ol style="list-style-type: none"> <li>1. 131</li> <li>2. 287</li> <li>3. 368</li> <li>4. 275</li> <li>5. 387</li> <li>6. 88</li> <li>7. 148</li> <li>8. 465</li> </ol>																				



# Computational Fluency Answer Key

## Grade 3

<u>3-17</u> 1. 566 2. 556 3. 1,271 4. 1,501 5. 470 6. 26 7. 455 8. 443 9. 841	<u>3-18</u> A.6,002 B.8,910 C.7,382 D.5,400 E.9,800 F.8,035 G.6,255 H.8,090 I.4,819	<u>3-19</u> A.6,841 B.6,817 C.6,247 D.3,847 E.6,324 F.2,324 G.2,456 H.1,197 I.1,168
<u>3-20</u> 1. 9,789 2. 4,594 3. 869 4. 6,903 5. 5,022 6. 3,519 7. 2,195 Burgers 8. \$310 9. 418 Adults	<u>3-21</u> 1. 3,001 eggs 2. 4,020 girls 3. 235 Kabobs 4. 2,758, 1,157 5. 889, \$2,628 6. \$400 7. 3,600, 1008 children 8. 1,313, \$1,208 9.	<u>3-22</u> 1. 12, 8, 0, 5 2. 30, 7, 20, 0 3. 0, 9, 36, 9 4. 24 Slices 5. 6 cars 6. \$50.00 7. \$6.00 8. 60 Kisses 9. \$12.00 10. 9 desks 11. 8 cards
<u>3-23</u> 1. 12, 8, 14, 8 2. 21, 7, 40, 6 3. 18, 4, 32, 7 4. 35, 8, 20, 9 5. 6 chairs 6. \$2800 7. \$80.00 8. 8 pounds 9. 32 pens 10. 40 journals 70 journals	<u>3-24</u> 1. a) 2 b) 3 c) 8 d) 8 e) 9 f) 7 g) 9 h) 3 I) 10 i) 10 j) 8 2. a) 8, 4, 1,2,4,8 b) 15, 5, 1,3,5,15	<u>3-25</u> 1. 160, 320, 1,500, 1,500 2. 180, 70, 2,000, 1,000 3. 240, 300, 1,200, 2,800 4. 100, 120, 800, 1500 5. 66, 288, 210, 136 6. 78, 136, 225, 215 7. 240 books, 270 books 8. 280 books 9. \$152.00 10. 228 cards

# Computational Fluency Answer Key

## Grade 3

<p><u>3-26</u></p> <ol style="list-style-type: none"><li>1,600, 1,248, 1,257, 1,750</li><li>1,812, 2,540, 2,500, 1,460</li><li>2,496, 2,160, 1,562, 2,892</li><li>4,000, 1,518, 1,756, 1,668</li><li>747, 2,527, 3,872, 1,408</li><li>432 pens</li><li>\$1,048</li><li>780 beads</li><li>1,250 grams</li><li>2,720, 3,400 eggs</li><li>750, \$900.00</li></ol>	<p><u>3-26a</u></p> <ol style="list-style-type: none"><li>840 Oreos</li><li>2,190 days</li><li>525 days</li><li>700 grams</li><li>\$360</li><li>143 Seats</li></ol>	<p><u>3-27</u></p> <ol style="list-style-type: none"><li>1,970, 5,467, 1,000</li><li>3,645, 2,317, 2,001</li><li>301, 1,435, 3,423</li><li>2,720 Students</li><li>2,566 Tickets</li><li>2,400 gallons</li><li>197 books</li><li>\$960.00</li></ol>
<p><u>3-28</u></p> <ol style="list-style-type: none"><li><ol style="list-style-type: none"><li>\$27.78</li><li>\$100.00</li><li>\$75.90</li><li>\$43.40</li><li>\$93.95</li><li>\$32.15</li></ol></li><li><ol style="list-style-type: none"><li>\$21.55</li><li>\$36.05</li><li>\$22.40</li><li>\$43.40</li><li>\$93.95</li><li>\$32.15</li></ol></li><li>\$101.00</li><li>\$13.90</li><li>\$22.40</li><li>\$3.05</li><li>\$25.65</li><li>\$17.90</li></ol>	<p><u>3-29</u></p> <ol style="list-style-type: none"><li>\$41.10, \$3.15</li><li>\$30.60, \$25.90</li><li>\$120.00, \$8.95</li><li>\$63.40, \$310.00</li><li>\$102.90, \$29.30</li><li>\$26.60</li><li>\$23.05</li><li>\$1.50</li><li>\$27.40</li><li>\$7.45, \$12.95</li></ol>	

## Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

### Mental Math

1.  $5 + 5 = \underline{\quad}$

2.  $5 + 6 = \underline{\quad}$

3.  $5 + 1 = \underline{\quad}$

4.  $4 + 4 = \underline{\quad}$

5.  $7 + 7 = \underline{\quad}$

6.  $4 + 9 = \underline{\quad}$

7.  $6 + 4 = \underline{\quad}$

8.  $7 + 7 = \underline{\quad}$

9.  $6 + 4 = \underline{\quad}$

10.  $7 + 6 = \underline{\quad}$

11.  $9 + 5 = \underline{\quad}$

12.  $7 + 5 = \underline{\quad}$

13.  $8 + 4 = \underline{\quad}$

14.  $9 + 6 = \underline{\quad}$

15.  $3 + 8 = \underline{\quad}$

16.  $9 + 2 = \underline{\quad}$

17.  $7 + 9 = \underline{\quad}$

18.  $5 + 4 = \underline{\quad}$

19.  $3 + 7 = \underline{\quad}$

20.  $6 + 7 = \underline{\quad}$

## Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

### Mental Math

1.  $6 - 5 = \underline{\quad}$

2.  $5 - 3 = \underline{\quad}$

3.  $10 - 4 = \underline{\quad}$

4.  $10 - 3 = \underline{\quad}$

5.  $8 - 4 = \underline{\quad}$

6.  $4 - 2 = \underline{\quad}$

7.  $7 - 3 = \underline{\quad}$

8.  $9 - 5 = \underline{\quad}$

9.  $7 - 5 = \underline{\quad}$

10.  $8 - 6 = \underline{\quad}$

11.  $10 - 6 = \underline{\quad}$

12.  $8 - 7 = \underline{\quad}$

13.  $5 - 3 = \underline{\quad}$

14.  $10 - 5 = \underline{\quad}$

15.  $4 - 3 = \underline{\quad}$

16.  $6 - 4 = \underline{\quad}$

17.  $9 - 3 = \underline{\quad}$

18.  $9 - 2 = \underline{\quad}$

19.  $8 - 2 = \underline{\quad}$

20.  $8 - 4 = \underline{\quad}$

## Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

### Mental Math

1.  $13 - 7 = \underline{\quad}$

2.  $11 - 4 = \underline{\quad}$

3.  $16 - 9 = \underline{\quad}$

4.  $11 - 6 = \underline{\quad}$

5.  $11 - 8 = \underline{\quad}$

6.  $13 - 4 = \underline{\quad}$

7.  $16 - 7 = \underline{\quad}$

8.  $15 - 6 = \underline{\quad}$

9.  $15 - 9 = \underline{\quad}$

10.  $12 - 3 = \underline{\quad}$

11.  $17 - 8 = \underline{\quad}$

12.  $18 - 9 = \underline{\quad}$

13.  $11 - 9 = \underline{\quad}$

14.  $15 - 7 = \underline{\quad}$

15.  $14 - 9 = \underline{\quad}$

16.  $12 - 8 = \underline{\quad}$

17.  $13 - 6 = \underline{\quad}$

18.  $12 - 9 = \underline{\quad}$

19.  $14 - 6 = \underline{\quad}$

20.  $15 - 8 = \underline{\quad}$

## Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

### Mental Math

1.  $580 - 300 = \underline{\quad}$

2.  $61 - 2 = \underline{\quad}$

3.  $625 + 3 = \underline{\quad}$

4.  $298 + 100 = \underline{\quad}$

5.  $642 - 30 = \underline{\quad}$

6.  $303 - 200 = \underline{\quad}$

7.  $82 - 2 = \underline{\quad}$

8.  $152 + 200 = \underline{\quad}$

9.  $94 + 20 = \underline{\quad}$

10.  $82 - 20 = \underline{\quad}$

11.  $14 - 10 = \underline{\quad}$

12.  $673 - 10 = \underline{\quad}$

13.  $54 + 20 = \underline{\quad}$

14.  $432 + 10 = \underline{\quad}$

15.  $203 - 10 = \underline{\quad}$

16.  $760 + 30 = \underline{\quad}$

17.  $807 - 3 = \underline{\quad}$

18.  $73 - 2 = \underline{\quad}$

19.  $541 + 300 = \underline{\quad}$

20.  $146 + 200 = \underline{\quad}$

## Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

### Mental Math

1.  $52 + 5 = \underline{\quad}$

2.  $38 + 3 = \underline{\quad}$

3.  $52 + 6 = \underline{\quad}$

4.  $28 + 2 = \underline{\quad}$

5.  $25 + 5 = \underline{\quad}$

6.  $19 + 8 = \underline{\quad}$

7.  $65 + 4 = \underline{\quad}$

8.  $18 + 2 = \underline{\quad}$

9.  $65 + 8 = \underline{\quad}$

10.  $54 + 8 = \underline{\quad}$

11.  $56 + 6 = \underline{\quad}$

12.  $30 + 60 = \underline{\quad}$

13.  $27 + 6 = \underline{\quad}$

14.  $80 + 10 = \underline{\quad}$

15.  $34 + 6 = \underline{\quad}$

16.  $79 + 9 = \underline{\quad}$

17.  $24 + 3 = \underline{\quad}$

18.  $17 + 7 = \underline{\quad}$

19.  $62 + 8 = \underline{\quad}$

20.  $73 + 4 = \underline{\quad}$

## Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

### Mental Math

1.  $63 - 7 = \underline{\quad}$

2.  $67 - 9 = \underline{\quad}$

3.  $80 - 40 = \underline{\quad}$

4.  $73 - 9 = \underline{\quad}$

5.  $34 - 3 = \underline{\quad}$

6.  $60 - 7 = \underline{\quad}$

7.  $48 - 5 = \underline{\quad}$

8.  $31 - 7 = \underline{\quad}$

9.  $70 - 50 = \underline{\quad}$

10.  $32 - 9 = \underline{\quad}$

11.  $40 - 9 = \underline{\quad}$

12.  $70 - 10 = \underline{\quad}$

13.  $59 - 6 = \underline{\quad}$

14.  $66 - 7 = \underline{\quad}$

15.  $39 - 3 = \underline{\quad}$

16.  $86 - 7 = \underline{\quad}$

17.  $26 - 2 = \underline{\quad}$

18.  $10 - 4 = \underline{\quad}$

19.  $63 - 4 = \underline{\quad}$

20.  $60 - 4 = \underline{\quad}$



## Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

### Mental Math

1.  $4 + 3 = \underline{\quad}$

2.  $72 + 4 = \underline{\quad}$

3.  $352 + 3 = \underline{\quad}$

4.  $18 + 6 = \underline{\quad}$

5.  $799 + 1 = \underline{\quad}$

6.  $77 + 6 = \underline{\quad}$

7.  $371 + 6 = \underline{\quad}$

8.  $120 + 50 = \underline{\quad}$

9.  $217 + 5 = \underline{\quad}$

10.  $8 + 6 = \underline{\quad}$

11.  $483 + 70 = \underline{\quad}$

12.  $38 + 6 = \underline{\quad}$

13.  $17 + 3 = \underline{\quad}$

14.  $80 + 20 = \underline{\quad}$

15.  $6 + 4 = \underline{\quad}$

16.  $880 + 20 = \underline{\quad}$

17.  $66 + 4 = \underline{\quad}$

18.  $888 + 20 = \underline{\quad}$

19.  $759 + 8 = \underline{\quad}$

20.  $460 + 90 = \underline{\quad}$

## Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

### Mental Math

1.  $21 - 3 = \underline{\quad}$

2.  $41 - 3 = \underline{\quad}$

3.  $331 - 3 = \underline{\quad}$

4.  $84 - 8 = \underline{\quad}$

5.  $44 - 8 = \underline{\quad}$

6.  $564 - 8 = \underline{\quad}$

7.  $709 - 5 = \underline{\quad}$

8.  $479 - 5 = \underline{\quad}$

9.  $799 - 5 = \underline{\quad}$

10.  $152 - 9 = \underline{\quad}$

11.  $532 - 90 = \underline{\quad}$

12.  $300 - 60 = \underline{\quad}$

13.  $306 - 60 = \underline{\quad}$

14.  $432 - 30 = \underline{\quad}$

15.  $630 - 50 = \underline{\quad}$

16.  $220 - 70 = \underline{\quad}$

17.  $120 - 70 = \underline{\quad}$

18.  $540 - 80 = \underline{\quad}$

19.  $349 - 80 = \underline{\quad}$

20.  $672 - 90 = \underline{\quad}$

# Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

## Mental Math

1.  $1 \times 2 = \underline{\quad}$

2.  $7 \times 2 = \underline{\quad}$

3.  $2 \times 8 = \underline{\quad}$

4.  $1 \times 3 = \underline{\quad}$

5.  $8 \times 1 = \underline{\quad}$

6.  $3 \times 2 = \underline{\quad}$

7.  $9 \times 2 = \underline{\quad}$

8.  $5 \times 2 = \underline{\quad}$

9.  $2 \times 6 = \underline{\quad}$

10.  $10 \times 2 = \underline{\quad}$

11.  $1 \times 7 = \underline{\quad}$

12.  $2 \times 9 = \underline{\quad}$

13.  $4 \times 1 = \underline{\quad}$

14.  $20 \times 2 = \underline{\quad}$

15.  $8 \times 2 = \underline{\quad}$

16.  $2 \times 7 = \underline{\quad}$

17.  $2 \times 4 = \underline{\quad}$

18.  $5 \times 1 = \underline{\quad}$

19.  $6 \times 2 = \underline{\quad}$

20.  $10 \times 1 = \underline{\quad}$



## Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

### Mental Math

1.  $3 \times 4 = \underline{\quad}$

2.  $2 \times 6 = \underline{\quad}$

3.  $5 \times 3 = \underline{\quad}$

4.  $3 \times 8 = \underline{\quad}$

5.  $2 \times 8 = \underline{\quad}$

6.  $6 \times 2 = \underline{\quad}$

7.  $2 \times 3 = \underline{\quad}$

8.  $6 \times 3 = \underline{\quad}$

9.  $4 \times 2 = \underline{\quad}$

10.  $7 \times 3 = \underline{\quad}$

11.  $3 \times 10 = \underline{\quad}$

12.  $2 \times 2 = \underline{\quad}$

13.  $5 \times 2 = \underline{\quad}$

14.  $3 \times 3 = \underline{\quad}$

15.  $7 \times 2 = \underline{\quad}$

16.  $2 \times 9 = \underline{\quad}$

17.  $2 \times 10 = \underline{\quad}$

18.  $9 \times 3 = \underline{\quad}$

19.  $20 \times 2 = \underline{\quad}$

20.  $3 \times 30 = \underline{\quad}$

## Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

### Mental Math

1.  $20 \div 1 = \underline{\quad}$

2.  $4 \div 2 = \underline{\quad}$

3.  $20 \div 2 = \underline{\quad}$

4.  $18 \div 2 = \underline{\quad}$

5.  $6 \div 2 = \underline{\quad}$

6.  $14 \div 1 = \underline{\quad}$

7.  $10 \div 2 = \underline{\quad}$

8.  $6 \div 2 = \underline{\quad}$

9.  $14 \div 2 = \underline{\quad}$

10.  $8 \div 1 = \underline{\quad}$

11.  $8 \div 2 = \underline{\quad}$

12.  $2 \div 2 = \underline{\quad}$

13.  $16 \div 2 = \underline{\quad}$

14.  $12 \div 2 = \underline{\quad}$

15.  $9 \div 1 = \underline{\quad}$

16.  $14 \div 2 = \underline{\quad}$

17.  $18 \div 2 = \underline{\quad}$

18.  $20 \div 2 = \underline{\quad}$

19.  $11 \div 1 = \underline{\quad}$

20.  $341 \div 1 = \underline{\quad}$

## Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

### Mental Math

1.  $9 \div 3 = \underline{\quad}$

2.  $6 \div 2 = \underline{\quad}$

3.  $30 \div 3 = \underline{\quad}$

4.  $3 \div 3 = \underline{\quad}$

5.  $24 \div 3 = \underline{\quad}$

6.  $4 \div 2 = \underline{\quad}$

7.  $14 \div 2 = \underline{\quad}$

8.  $27 \div 3 = \underline{\quad}$

9.  $9 \div 3 = \underline{\quad}$

10.  $15 \div 3 = \underline{\quad}$

11.  $16 \div 2 = \underline{\quad}$

12.  $10 \div 2 = \underline{\quad}$

13.  $30 \div 3 = \underline{\quad}$

14.  $21 \div 3 = \underline{\quad}$

15.  $18 \div 3 = \underline{\quad}$

16.  $18 \div 2 = \underline{\quad}$

17.  $8 \div 2 = \underline{\quad}$

18.  $15 \div 3 = \underline{\quad}$

19.  $6 \div 3 = \underline{\quad}$

20.  $20 \div 2 = \underline{\quad}$

## Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

### Mental Math

1.  $6 \div 1 = \underline{\quad}$

2.  $6 \times 2 = \underline{\quad}$

3.  $27 \div 3 = \underline{\quad}$

4.  $8 \times 2 = \underline{\quad}$

5.  $3 \times 2 = \underline{\quad}$

6.  $10 \times 3 = \underline{\quad}$

7.  $18 \div 3 = \underline{\quad}$

8.  $12 \div 3 = \underline{\quad}$

9.  $5 \times 3 = \underline{\quad}$

10.  $7 \times 3 = \underline{\quad}$

11.  $12 \div 2 = \underline{\quad}$

12.  $30 \div 3 = \underline{\quad}$

13.  $6 \div 2 = \underline{\quad}$

14.  $9 \times 2 = \underline{\quad}$

15.  $3 \times 4 = \underline{\quad}$

16.  $7 \times 2 = \underline{\quad}$

17.  $15 \div 3 = \underline{\quad}$

18.  $8 \div 2 = \underline{\quad}$

19.  $5 \times 1 = \underline{\quad}$

20.  $20 \div 2 = \underline{\quad}$



## Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

### Mental Math

1.  $7 \times 2 = \underline{\quad}$

2.  $12 \div 3 = \underline{\quad}$

3.  $16 \div 2 = \underline{\quad}$

4.  $15 \div 3 = \underline{\quad}$

5.  $7 \times 3 = \underline{\quad}$

6.  $24 \div 3 = \underline{\quad}$

7.  $10 \times 2 = \underline{\quad}$

8.  $4 \div 2 = \underline{\quad}$

9.  $9 \times 3 = \underline{\quad}$

10.  $18 \div 2 = \underline{\quad}$

11.  $3 \times 3 = \underline{\quad}$

12.  $21 \div 3 = \underline{\quad}$

13.  $2 \times 6 = \underline{\quad}$

14.  $18 \div 3 = \underline{\quad}$

15.  $4 \div 1 = \underline{\quad}$

16.  $4 \times 3 = \underline{\quad}$

17.  $2 \div 2 = \underline{\quad}$

18.  $30 \div 3 = \underline{\quad}$

19.  $3 \times 6 = \underline{\quad}$

20.  $8 \times 3 = \underline{\quad}$

## Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

### Mental Math

1.  $\$8.30 - \$4 = \underline{\hspace{2cm}}$

2.  $\$4.15 - \$2 = \underline{\hspace{2cm}}$

3.  $\$9.66 - \$5 = \underline{\hspace{2cm}}$

4.  $\$1 - 0.75 = \underline{\hspace{2cm}}$

5.  $\$6 - 0.45 = \underline{\hspace{2cm}}$

6.  $\$8 - 0.23 = \underline{\hspace{2cm}}$

7.  $\$10 - 0.65 = \underline{\hspace{2cm}}$

8.  $\$10 - \$3.10 = \underline{\hspace{2cm}}$

9.  $\$4.70 - \$1.15 = \underline{\hspace{2cm}}$

10.  $\$8.80 - \$4.25 = \underline{\hspace{2cm}}$

11.  $\$8.88 - \$4.26 = \underline{\hspace{2cm}}$

12.  $\$5.70 - \$2.25 = \underline{\hspace{2cm}}$

13.  $\$5.90 - \$0.99 = \underline{\hspace{2cm}}$

14.  $\$4.55 - \$0.95 = \underline{\hspace{2cm}}$

15.  $\$3.21 - \$0.97 = \underline{\hspace{2cm}}$

16.  $\$6.35 - \$4.96 = \underline{\hspace{2cm}}$

17.  $\$7.05 - \$1.97 = \underline{\hspace{2cm}}$

18.  $\$4.95 - \$2.96 = \underline{\hspace{2cm}}$

19.  $\$5.98 - \$1.25 = \underline{\hspace{2cm}}$

20.  $\$10 - \$4.15 = \underline{\hspace{2cm}}$

## Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

### Mental Math

1.  $\$0.65 + \underline{\hspace{2cm}} = \$1$

2.  $\$0.75 + \underline{\hspace{2cm}} = \$1$

3.  $\$3.75 + \underline{\hspace{2cm}} = \$10$

4.  $\$8.15 + \underline{\hspace{2cm}} = \$10$

5.  $\$0.41 + \underline{\hspace{2cm}} = \$1$

6.  $\$5.08 + \underline{\hspace{2cm}} = \$10$

7.  $\$5.30 + \$2 = \underline{\hspace{2cm}}$

8.  $\$2.65 + \$6 = \underline{\hspace{2cm}}$

9.  $\$6.35 + \$0.40 = \underline{\hspace{2cm}}$

10.  $\$3.31 + \$0.52 = \underline{\hspace{2cm}}$

11.  $\$2.65 + \$6.10 = \underline{\hspace{2cm}}$

12.  $\$3.21 + \$1.17 = \underline{\hspace{2cm}}$

13.  $\$6.35 + \$0.99 = \underline{\hspace{2cm}}$

14.  $\$5.37 + \$0.95 = \underline{\hspace{2cm}}$

15.  $\$2.15 + \$0.97 = \underline{\hspace{2cm}}$

16.  $\$7.05 + \$1.97 = \underline{\hspace{2cm}}$

17.  $\$3.25 + \$1.75 = \underline{\hspace{2cm}}$

18.  $\$4.95 + \$2.96 = \underline{\hspace{2cm}}$

19.  $\$5.98 + \$1.25 = \underline{\hspace{2cm}}$

20.  $\$3.58 + \$4.15 = \underline{\hspace{2cm}}$

## Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

### Mental Math

1.  $100 - 30 = \underline{\hspace{2cm}}$

2.  $100 - 75 = \underline{\hspace{2cm}}$

3.  $100 - 7 = \underline{\hspace{2cm}}$

4.  $100 - 98 = \underline{\hspace{2cm}}$

5.  $100 - 6 = \underline{\hspace{2cm}}$

6.  $100 - 35 = \underline{\hspace{2cm}}$

7.  $100 - 48 = \underline{\hspace{2cm}}$

8.  $100 - 25 = \underline{\hspace{2cm}}$

9.  $100 - 46 = \underline{\hspace{2cm}}$

10.  $100 - 10 = \underline{\hspace{2cm}}$

11.  $100 - 77 = \underline{\hspace{2cm}}$

12.  $100 - 12 = \underline{\hspace{2cm}}$

13.  $100 - 5 = \underline{\hspace{2cm}}$

14.  $100 - 29 = \underline{\hspace{2cm}}$

15.  $100 - 23 = \underline{\hspace{2cm}}$

16.  $42 + \underline{\hspace{2cm}} = 100$

17.  $61 + \underline{\hspace{2cm}} = 100$

18.  $57 + \underline{\hspace{2cm}} = 100$

19.  $60 + \underline{\hspace{2cm}} = 100$

20.  $\underline{\hspace{2cm}} + 40 = 100$

21.  $\underline{\hspace{2cm}} + 35 = 100$

22.  $\underline{\hspace{2cm}} + 3 = 100$

23.  $\underline{\hspace{2cm}} + 22 = 100$

24.  $100 - \underline{\hspace{2cm}} = 50$

25.  $100 - \underline{\hspace{2cm}} = 61$

26.  $100 - \underline{\hspace{2cm}} = 84$

27.  $100 - \underline{\hspace{2cm}} = 53$

28.  $100 - \underline{\hspace{2cm}} = 38$

29.  $100 - \underline{\hspace{2cm}} = 79$

30.  $100 - \underline{\hspace{2cm}} = 9$

# Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

## Mental Math

1.  $33 + 4 =$  \_\_\_\_\_

16.  $73 + 6 =$  \_\_\_\_\_

2.  $62 + 5 =$  \_\_\_\_\_

17.  $59 + 8 =$  \_\_\_\_\_

3.  $44 + 6 =$  \_\_\_\_\_

18.  $38 + 3 =$  \_\_\_\_\_

4.  $59 + 6 =$  \_\_\_\_\_

19.  $79 + 7 =$  \_\_\_\_\_

5.  $26 + 7 =$  \_\_\_\_\_

20.  $28 + 2 =$  \_\_\_\_\_

6.  $25 + 4 =$  \_\_\_\_\_

21.  $17 + 7 =$  \_\_\_\_\_

7.  $64 + 8 =$  \_\_\_\_\_

22.  $19 + 8 =$  \_\_\_\_\_

8.  $77 + 4 =$  \_\_\_\_\_

23.  $73 + 4 =$  \_\_\_\_\_

9.  $71 + 7 =$  \_\_\_\_\_

24.  $18 + 2 =$  \_\_\_\_\_

10.  $35 + 7 =$  \_\_\_\_\_

25.  $59 + 9 =$  \_\_\_\_\_

11.  $27 + 8 =$  \_\_\_\_\_

26.  $36 + 3 =$  \_\_\_\_\_

12.  $35 + 3 =$  \_\_\_\_\_

27.  $54 + 8 =$  \_\_\_\_\_

13.  $56 + 4 =$  \_\_\_\_\_

28.  $13 + 5 =$  \_\_\_\_\_

14.  $36 + 6 =$  \_\_\_\_\_

29.  $82 + 9 =$  \_\_\_\_\_

15.  $36 + 6 =$  \_\_\_\_\_

30.  $53 + 7 =$  \_\_\_\_\_

## Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

### Mental Math

1.  $11 + 70 = \underline{\quad}$

2.  $17 + 50 = \underline{\quad}$

3.  $62 + 20 = \underline{\quad}$

4.  $60 + 60 = \underline{\quad}$

5.  $78 + 10 = \underline{\quad}$

6.  $70 + 40 = \underline{\quad}$

7.  $98 + 20 = \underline{\quad}$

8.  $56 + 80 = \underline{\quad}$

9.  $12 + 50 = \underline{\quad}$

10.  $77 + 50 = \underline{\quad}$

11.  $34 + 90 = \underline{\quad}$

12.  $32 + 90 = \underline{\quad}$

13.  $86 + 40 = \underline{\quad}$

14.  $32 + 40 = \underline{\quad}$

15.  $52 + 50 = \underline{\quad}$

16.  $70 + 67 = \underline{\quad}$

17.  $60 + 60 = \underline{\quad}$

18.  $78 + 20 = \underline{\quad}$

19.  $38 + 50 = \underline{\quad}$

20.  $24 + 60 = \underline{\quad}$

## Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

### Mental Math

1.  $411 + 10 = \underline{\quad}$

2.  $728 + 40 = \underline{\quad}$

3.  $460 + 60 = \underline{\quad}$

4.  $312 + 70 = \underline{\quad}$

5.  $677 + 20 = \underline{\quad}$

6.  $321 + 20 = \underline{\quad}$

7.  $451 + 50 = \underline{\quad}$

8.  $229 + 50 = \underline{\quad}$

9.  $462 + 50 = \underline{\quad}$

10.  $877 + 70 = \underline{\quad}$

11.  $334 + 90 = \underline{\quad}$

12.  $232 + 200 = \underline{\quad}$

13.  $386 + 400 = \underline{\quad}$

14.  $232 + 400 = \underline{\quad}$

15.  $252 + 500 = \underline{\quad}$

16.  $273 + 600 = \underline{\quad}$

17.  $56 + 500 = \underline{\quad}$

18.  $673 + 400 = \underline{\quad}$

19.  $209 + 30 = \underline{\quad}$

20.  $752 + 200 = \underline{\quad}$

## Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

### Mental Math

1.  $90 - 8 = \underline{\quad}$

2.  $21 - 6 = \underline{\quad}$

3.  $42 - 9 = \underline{\quad}$

4.  $73 - 8 = \underline{\quad}$

5.  $94 - 8 = \underline{\quad}$

6.  $86 - 8 = \underline{\quad}$

7.  $82 - 4 = \underline{\quad}$

8.  $75 - 7 = \underline{\quad}$

9.  $53 - 9 = \underline{\quad}$

10.  $94 - 7 = \underline{\quad}$

11.  $33 - 4 = \underline{\quad}$

12.  $32 - 9 = \underline{\quad}$

13.  $42 - 6 = \underline{\quad}$

14.  $75 - 8 = \underline{\quad}$

15.  $71 - 2 = \underline{\quad}$

16.  $67 - 9 = \underline{\quad}$

17.  $62 - 7 = \underline{\quad}$

18.  $53 - 6 = \underline{\quad}$

19.  $55 - 8 = \underline{\quad}$

20.  $83 - 4 = \underline{\quad}$





## Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

### Mental Math

1.  $8 \div 4 = \underline{\quad}$

2.  $12 \div 3 = \underline{\quad}$

3.  $20 \div 4 = \underline{\quad}$

4.  $24 \div 4 = \underline{\quad}$

5.  $36 \div 4 = \underline{\quad}$

6.  $28 \div 4 = \underline{\quad}$

7.  $21 \div 3 = \underline{\quad}$

8.  $15 \div 3 = \underline{\quad}$

9.  $8 \div 4 = \underline{\quad}$

10.  $32 \div 4 = \underline{\quad}$

11.  $32 \div 4 = \underline{\quad}$

12.  $18 \div 3 = \underline{\quad}$

13.  $30 \div 3 = \underline{\quad}$

14.  $40 \div 4 = \underline{\quad}$

15.  $12 \div 4 = \underline{\quad}$

16.  $20 \div 4 = \underline{\quad}$

17.  $40 \div 4 = \underline{\quad}$

18.  $16 \div 4 = \underline{\quad}$

19.  $4 \div 4 = \underline{\quad}$

20.  $24 \div 4 = \underline{\quad}$



## Computational Fluency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

### Mental Math

1.  $32 \div 4 = \underline{\quad}$

2.  $45 \div 5 = \underline{\quad}$

3.  $36 \div 4 = \underline{\quad}$

4.  $25 \div 5 = \underline{\quad}$

5.  $5 \div 5 = \underline{\quad}$

6.  $15 \div 5 = \underline{\quad}$

7.  $35 \div 5 = \underline{\quad}$

8.  $10 \div 5 = \underline{\quad}$

9.  $20 \div 5 = \underline{\quad}$

10.  $45 \div 5 = \underline{\quad}$

11.  $30 \div 5 = \underline{\quad}$

12.  $20 \div 4 = \underline{\quad}$

13.  $45 \div 5 = \underline{\quad}$

14.  $35 \div 5 = \underline{\quad}$