

Table of Contents**UNIT 1 WHOLE NUMBERS**

- 1 Place Value
- 2 Compare and Order Numbers
- 3 Estimate Sums and Differences
- 4 Add and Subtract Numbers
- 5 Estimate Products
- 6 Multiply Numbers
- 7 Estimate Quotients
- 8 Divide Numbers
- 9 Variables and Expressions
- 10 Solve Equations
- 11 Mixed Practice
- 12 Story Problems
- 13 Take a Test Drive
- 14 Take a Test Drive

UNIT 2 DECIMALS

- 15 Place Value
- 16 Compare and Order Decimals
- 17 Estimate Decimal Sums and Differences
- 18 Add and Subtract Decimals
- 19 Multiply Decimals by 10, 100, and 1,000
- 20 Divide Decimals by 10, 100, and 1,000
- 21 Estimate Decimal Products
- 22 Multiply Decimals
- 23 Divide Decimals
- 24 Mixed Practice
- 25 Take a Test Drive
- 26 Take a Test Drive

UNIT 3 NUMBER THEORY

- 27 Find Prime Numbers
- 28 Prime and Composite Numbers
- 29 Divisibility Rules

- 30 Greatest Common Factor
- 31 Least Common Multiple
- 32 Least Common Denominator
- 33 Sequences
- 34 Functions and Rules
- 35 Take a Test Drive
- 36 Take a Test Drive

UNIT 4 FRACTIONS

- 37 Fractions
- 38 Equivalent Fractions
- 39 Fractions in Simplest Form
- 40 Compare and Order Fractions
- 41 Mixed Numbers and Improper Fractions
- 42 Compare Fractions, Decimals, and Mixed Numbers
- 43 Estimate Fraction Sums and Differences
- 44 Add and Subtract Fractions
- 45 Add Fractions with Unlike Denominators
- 46 Subtract Fractions with Unlike Denominators
- 47 Estimate Mixed Number Sums and Differences
- 48 Add Mixed Numbers
- 49 Subtract Mixed Numbers
- 50 Add and Subtract Fraction Practice
- 51 Multiply Fractions
- 52 Multiply Mixed Numbers
- 53 Take a Test Drive
- 54 Take a Test Drive

Table of Contents

UNIT 5 PERCENT, PROBABILITY, AND DATA ANALYSIS

- 55 Percents
- 56 Fractions and Percents
- 57 Compare and Order Fractional Numbers
- 58 Find Percent of a Number
- 59 Outcomes
- 60 Probability
- 61 Range, Mode, and Median
- 62 Find the Mean
- 63 Line Plots
- 64 Stem-and-Leaf Graphs
- 65 Bar Graphs
- 66 Double Bar Graphs
- 67 Line Graphs
- 68 Double Line Graphs
- 69 Circle Graphs
- 70 Choose Appropriate Graphs
- 71 Take a Test Drive
- 72 Take a Test Drive

UNIT 6 GEOMETRY

- 73 Geometric Ideas
- 74 Plane and Solid Figures
- 75 Classify Angles
- 76 Classify Triangles
- 77 Coordinate Geometry
- 78 Slides, Flips, and Turns
- 79 Similar and Congruent Figures
- 80 Circles
- 81 Take a Test Drive

- 82 Take a Test Drive

UNIT 7 MEASUREMENT

- 83 Standard Units of Length
- 84 Metric Units of Length
- 85 Standard Units of Weight and Capacity
- 86 Metric Units of Weight and Capacity
- 87 Temperature
- 88 Elapsed Time
- 89 Perimeter
- 90 Perimeter of Squares and Rectangles
- 91 Area of Squares and Rectangles
- 92 Area of Parallelograms and Triangles
- 93 Volume of Rectangular Prisms
- 94 Surface Area of Rectangular Prisms
- 95 Exact Measurement or an Estimate?
- 96 Measurement in Real Life
- 97 Practice Test
- 98 Practice Test
- 99 Practice Test
- 100 Practice Test
Tracking Sheet
Answer Key

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Introduction

The Advantage Math Series for grades 3–6 offers instruction and practice for key skills in each math strand recommended by the National Council for Teachers of Mathematics (NCTM), including

- numeration and number theory
- operations
- geometry
- measurement
- patterns, functions, and algebra
- data analysis and probability
- problem solving

Take a look at all the advantages this math series offers . . .

Strong Skill Instruction

- The **teaching component** at the top of the activity pages provides the support students need to work through the book independently.
- Plenty of **skill practice** pages will ensure students master essential math computation skills they need to increase their math fluency.
- A **problem-solving strand** is woven within skill practice pages to offer students an opportunity to practice critical thinking skills.

teaching component

Name _____

27 Subtraction—Regrouping

When subtracting, look at the ones column first. If the bottom digit is greater than the top digit, you need to regroup.

Look at the ones column. Since 8 is greater than 1, you need to regroup. Take 1 ten from the tens place, add it to the ones. Subtract the ones. Then subtract the tens.

$$\begin{array}{r} 27 \\ -18 \\ \hline 9 \end{array}$$

Circle yes or no to tell if you need to regroup. Then subtract to solve.

1	$\begin{array}{r} 43 \\ -8 \\ \hline \end{array}$ yes	$\begin{array}{r} 28 \\ -16 \\ \hline \end{array}$ yes	$\begin{array}{r} 43 \\ -15 \\ \hline \end{array}$ yes	$\begin{array}{r} 37 \\ -28 \\ \hline \end{array}$ yes
2	$\begin{array}{r} 80 \\ -17 \\ \hline \end{array}$ yes	$\begin{array}{r} 52 \\ -12 \\ \hline \end{array}$ yes	$\begin{array}{r} 71 \\ -29 \\ \hline \end{array}$ no	$\begin{array}{r} 63 \\ -14 \\ \hline \end{array}$ yes
3	$\begin{array}{r} 32 \\ -23 \\ \hline \end{array}$ yes	$\begin{array}{r} 87 \\ -48 \\ \hline \end{array}$ no	$\begin{array}{r} 35 \\ -27 \\ \hline \end{array}$ yes	$\begin{array}{r} 46 \\ -18 \\ \hline \end{array}$ yes
4	$\begin{array}{r} 23 \\ -5 \\ \hline \end{array}$ yes	$\begin{array}{r} 30 \\ -22 \\ \hline \end{array}$ yes	$\begin{array}{r} 51 \\ -15 \\ \hline \end{array}$ yes	$\begin{array}{r} 72 \\ -33 \\ \hline \end{array}$ no
5	$\begin{array}{r} 46 \\ -37 \\ \hline \end{array}$ yes	$\begin{array}{r} 60 \\ -26 \\ \hline \end{array}$ yes	$\begin{array}{r} 56 \\ -27 \\ \hline \end{array}$ yes	$\begin{array}{r} 32 \\ -8 \\ \hline \end{array}$ yes

skill practice

Name _____

31 Addition and Subtraction

Solve.

1 $7 + 4 =$ _____ $8 + 9 =$ _____ $5 + 6 =$ _____ $5 + 8 =$ _____

2 $16 + 12 =$ _____ $8 + 21 =$ _____ $11 - 8 =$ _____ $14 - 6 =$ _____

3 $15 - 8 =$ _____ $18 - 9 =$ _____ $19 - 11 =$ _____ $23 - 12 =$ _____

4

$\begin{array}{r} 21 \\ +38 \\ \hline \end{array}$	$\begin{array}{r} 74 \\ +12 \\ \hline \end{array}$	$\begin{array}{r} 58 \\ +60 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ +40 \\ \hline \end{array}$	$\begin{array}{r} 26 \\ +42 \\ \hline \end{array}$	$\begin{array}{r} 26 \\ +52 \\ \hline \end{array}$
--	--	--	---	--	--

5

$\begin{array}{r} 98 \\ -53 \\ \hline \end{array}$	$\begin{array}{r} 84 \\ -50 \\ \hline \end{array}$	$\begin{array}{r} 45 \\ -62 \\ \hline \end{array}$	$\begin{array}{r} 67 \\ -72 \\ \hline \end{array}$	$\begin{array}{r} 78 \\ -53 \\ \hline \end{array}$	$\begin{array}{r} 60 \\ -50 \\ \hline \end{array}$
--	--	--	--	--	--

6

$\begin{array}{r} 342 \\ -406 \\ \hline \end{array}$	$\begin{array}{r} 732 \\ -253 \\ \hline \end{array}$	$\begin{array}{r} 63 \\ -216 \\ \hline \end{array}$	$\begin{array}{r} 834 \\ +155 \\ \hline \end{array}$	$\begin{array}{r} 930 \\ +58 \\ \hline \end{array}$	$\begin{array}{r} 345 \\ +533 \\ \hline \end{array}$
--	--	---	--	---	--

7

$\begin{array}{r} 735 \\ -314 \\ \hline \end{array}$	$\begin{array}{r} 830 \\ -438 \\ \hline \end{array}$	$\begin{array}{r} 956 \\ -433 \\ \hline \end{array}$	$\begin{array}{r} 648 \\ -521 \\ \hline \end{array}$	$\begin{array}{r} 597 \\ -364 \\ \hline \end{array}$	$\begin{array}{r} 475 \\ -433 \\ \hline \end{array}$
--	--	--	--	--	--

problem solving

Name _____

43 Multiplication

When you multiply large numbers by a 1-digit number, multiply each digit of the top number by the bottom number, starting with the ones place. Regroup if the product is 10 or more.

Solve.

1

$\begin{array}{r} 45 \\ \times 3 \\ \hline \end{array}$	$\begin{array}{r} 36 \\ \times 5 \\ \hline \end{array}$	$\begin{array}{r} 15 \\ \times 7 \\ \hline \end{array}$	$\begin{array}{r} 40 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 73 \\ \times 2 \\ \hline \end{array}$	$\begin{array}{r} 84 \\ \times 1 \\ \hline \end{array}$
---	---	---	---	---	---

2

$\begin{array}{r} 19 \\ \times 3 \\ \hline \end{array}$	$\begin{array}{r} 36 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 47 \\ \times 2 \\ \hline \end{array}$	$\begin{array}{r} 152 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 261 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 350 \\ \times 2 \\ \hline \end{array}$
---	---	---	--	--	--

3

$\begin{array}{r} 428 \\ \times 2 \\ \hline \end{array}$	$\begin{array}{r} 579 \\ \times 3 \\ \hline \end{array}$	$\begin{array}{r} 990 \\ \times 5 \\ \hline \end{array}$	$\begin{array}{r} 372 \\ \times 7 \\ \hline \end{array}$	$\begin{array}{r} 206 \\ \times 3 \\ \hline \end{array}$	$\begin{array}{r} 713 \\ \times 6 \\ \hline \end{array}$
--	--	--	--	--	--

4

$\begin{array}{r} 179 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 803 \\ \times 1 \\ \hline \end{array}$	$\begin{array}{r} 263 \\ \times 3 \\ \hline \end{array}$	$\begin{array}{r} 3917 \\ \times 5 \\ \hline \end{array}$	$\begin{array}{r} 5782 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 1429 \\ \times 5 \\ \hline \end{array}$
--	--	--	---	---	---

5 At Pancha's Restaurant, 310 burritos are sold each year. Pancha's has been open for 5 years. How many burritos have been sold since Pancha's opened?

6 Pavee travels from Miami, Florida, to Denver, Colorado, cost \$522 each. The 4 members of the Wilson family are buying tickets from Miami to Denver. How much will the tickets cost?

7 Megan bought 5 large bags of peanuts. There are 210 peanuts in each bag. How many peanuts does she have in all?

Introduction

- **Mixed-practice pages** include a variety of math concepts on one workbook page. This challenges students to think through each problem rather than rely on a predictable format.

Assessment

- The “Take a Test Drive” pages provide practice using a **test-taking** format such as those included in national standardized and proficiency tests.
- The **tracking sheet** provides a place to record the number of right answers scored on each activity page. Use this as a motivational tool for students to strive for 100% accuracy.

Answer Key

- Answers for each page are provided at the back of the books to make **checking answers quick and easy**.

53 Mixed Practice

Solve.

- $47 \div 3$
- $6 \overline{)72}$
- $2637 \div 39$
- $29 \overline{)61}$
- $2 \overline{)58}$
- $7 \overline{)105}$

- $40 \div 83$
- $34 \div 25$
- $8 \overline{)168}$
- $7 \overline{)322}$
- $5763 \div 3294$
- $37.09 \div 34.5$

- $5 \overline{)370}$
- $65 \div 23$
- 146×13
- 43×84
- $351 \div 872$
- $5 \overline{)3415}$

- $9 \overline{)7038}$
- $746 \div 209$
- $4 \overline{)388}$
- $287 \div 32$
- $2974 \div 1098$
- $472 \div 665$

6 The band called the Screammers is playing in town for the next 4 nights. There are 42 seats in the club and all 4 shows are sold out. How many tickets were sold in all?

7 Billy, Martha, and Tom just won \$72. If they split the money evenly, how many dollars will each friend have?

mixed practice

69 Take a Test Drive

Test-Taking Tip: Pay attention to the labels in each answer choice. They give units of length, weight, temperature, angle. Fill in the bubble beside the correct answer.

- How long is the piece of gum?
 - $\frac{1}{2}$ sec
 - $\frac{1}{2}$ in.
 - $\frac{1}{2}$ min.
 - 0.5 cm
- 240 seconds = $\frac{1}{4}$
 - minutes
 - hours
 - days
- What is the perimeter of the floor of the television set?
 - 60 cm
 - 30 in.
 - 30 cm
 - 22 m
- _____ years = 1095 days
 - 3
 - 10
 - 4
 - 1
- What is the area of the top of the box?
 - 11 ft
 - 30 sq ft
 - 30 ft
 - 22 sq ft
- How many right angles does this figure have?
 - 5
 - 4
 - 2
 - 3
- What is the volume of the milk carton?
 - 360 sq cm
 - 320 cm
 - 360 cu cm
 - 36 cm
- \angle KMN measures _____.
 - 180°
 - 135°
 - 45°
 - 90°

test-taking format

Math Grade 3 Tracking Sheet

Activity	Possible # of Points	Actual # of Points	Activity	Possible # of Points	Actual # of Points	Activity	Possible # of Points	Actual # of Points
Unit 1			Unit 2			Unit 3		
1	8		1	8		1	8	
2	10		2	10		2	10	
3	16		3	16		3	16	
4	18		4	18		4	18	
5	26		5	26		5	26	
6	19		6	19		6	19	
7	19		7	19		7	19	
8	20		8	20		8	20	
9	21		9	21		9	21	
10	24		10	24		10	24	
11	8		11	8		11	8	
12	8		12	8		12	8	
Unit 4			Unit 5			Unit 6		
13	24		13	24		13	24	
14	38		14	38		14	38	
15	27		15	27		15	27	
16	27		16	27		16	27	
17	20		17	20		17	20	
18	30		18	30		18	30	
19	18		19	18		19	18	
20	30		20	30		20	30	
21	8		21	8		21	8	
22	8		22	8		22	8	
23	36		23	36		23	36	
24	36		24	36		24	36	
25	27		25	27		25	27	

tracking sheet

Name _____

Place Value

1

Millions			Thousands			Ones		
Hundreds	Tens	Ones	Hundreds	Tens	Ones	Hundreds	Tens	Ones
7	0	3	6	5	1	8	9	6

Standard form: 703,651,896

Short word form: 703 million, 651 thousand, 896

Expanded form: $700,000,000 + 3,000,000 + 600,000 + 50,000 + 1,000 + 800 + 90 + 6$

Write each number in standard form.

- 1 65 thousand, 4 hundred, 9 _____
- 2 $20,000,000 + 6,000,000 + 500,000 + 3,000 + 70$ _____
- 3 three hundred eighty million, forty-five _____
- 4 $70,000,000 + 70,000 + 70$ _____
- 5 932 million, 408 thousand _____
- 6 $400,000,000 + 300,000 + 700$ _____

Write the value of the 3 in each number.

- 7 4,386 _____ 43,086 _____
- 8 403,806 _____ 37,402,088 _____
- 9 837,604 _____ 6,478,531 _____

- 10 Earth is about ninety-three million miles from the sun. Write the number in standard form. _____
- 11 Mars is 141,710,000 miles from the sun. Write the number in short word form.

Name _____

Compare and Order Numbers

2



Compare 3,748 and 3,487. Which number is greater?

3,748 7 hundreds > 4 hundreds

> greater than

3,487 3,748 > 3,487

< less than

3,748 is greater than 3,487

= equals

Complete the number sentence.

1 $842 \bigcirc 598$

$423 \bigcirc 424$

2 $736 \bigcirc 763$

$1,234 \bigcirc 2,143$

3 $6,408 \bigcirc 6,840$

$83,303 \bigcirc 83,033$

4 $137,627 \bigcirc 141,672$

$573,240 \bigcirc 572,304$

5 $9,612,924 \bigcirc 9,596,999$

$45,866,854 \bigcirc 45,686,854$

Order the numbers from least to greatest.

6 834, 348, 843, 438 _____

7 45,672 46,762 45,692 _____

8 327,605 325,750 325,805 _____

9 1,375,671 1,373,917 1,375,617 _____

10 63,367 63,736 67,673 67,376 _____

11 Grant School has 1,248 students. Lincoln School has 2,104 students. Franklin School has 1,099 students. Which school has the greatest number of students?

12 Which school has the least number of students? _____

Name _____

Estimate Sums and Differences

3

★ To estimate, round numbers, then add or subtract.

Estimate: $729 + 1,853$
 $700 + 2,000 = 2,700$
 $729 + 1,853$ is *about* 2,700.

Estimate. Write the rounded numbers and the sum or difference.

- | | | |
|---|--------------------|-----------------------|
| 1 | $5,095 + 836$ | _____ + _____ = _____ |
| 2 | $4,365 - 1,706$ | _____ - _____ = _____ |
| 3 | $1,143 - 683$ | _____ - _____ = _____ |
| 4 | $23,087 + 6,999$ | _____ + _____ = _____ |
| 5 | $372,000 - 99,995$ | _____ - _____ = _____ |
| 6 | $408,973 + 48,073$ | _____ + _____ = _____ |

Estimate the sum or difference.

- | | | |
|----|---------------------------|---------------------------|
| 7 | $586 + 3,205$ _____ | $7,386 - 971$ _____ |
| 8 | $17,400 - 6,035$ _____ | $34,605 + 19,543$ _____ |
| 9 | $36,087 - 8,034$ _____ | $3,572 + 8,124$ _____ |
| 10 | $326,799 - 188,000$ _____ | $492,765 + 603,091$ _____ |

11 The cafeteria served 894 bananas and 1,237 apples during lunch. About how much fruit was served? _____

12 One day, 4,326 people ate at the cafeteria. The next day, 3,784 people ate there. About how many people ate at the cafeteria during those two days?

Name _____

Add and Subtract Numbers

4

★ Find the difference of 26,053 and 12,786.

Subtract ones.
Regroup if needed.

$$\begin{array}{r} ^{413} \\ 26,0\cancel{53} \\ -12,786 \\ \hline 7 \end{array}$$

Subtract tens.
Regroup if needed.

$$\begin{array}{r} ^{91413} \\ 26,0\cancel{53} \\ -12,786 \\ \hline 67 \end{array}$$

Subtract hundreds.
Regroup if needed.

$$\begin{array}{r} ^{591413} \\ 26,0\cancel{53} \\ -12,786 \\ \hline 267 \end{array}$$

Subtract thousands.

$$\begin{array}{r} ^{591413} \\ 26,0\cancel{53} \\ -12,786 \\ \hline 3,267 \end{array}$$

Subtract ten thousands.

$$\begin{array}{r} ^{591413} \\ 26,0\cancel{53} \text{ minuend} \\ -12,786 \text{ minuend} \\ \hline 13,267 \text{ difference} \end{array}$$

Find the sums and differences.

- | | | | | | | |
|---|--|--|--|---|--|--|
| 1 | $\begin{array}{r} 97 \\ +45 \\ \hline \end{array}$ | $\begin{array}{r} 56 \\ -29 \\ \hline \end{array}$ | $\begin{array}{r} 386 \\ +636 \\ \hline \end{array}$ | $\begin{array}{r} 716 \\ -649 \\ \hline \end{array}$ | $\begin{array}{r} 684 \\ -294 \\ \hline \end{array}$ | $\begin{array}{r} 278 \\ +103 \\ \hline \end{array}$ |
| 2 | $\begin{array}{r} 326 \\ +845 \\ \hline \end{array}$ | $\begin{array}{r} 3,645 \\ -1,248 \\ \hline \end{array}$ | $\begin{array}{r} 73,864 \\ +16,136 \\ \hline \end{array}$ | $\begin{array}{r} 60,216 \\ -39,583 \\ \hline \end{array}$ | $\begin{array}{r} 4,827 \\ +1,608 \\ \hline \end{array}$ | $\begin{array}{r} 7,821 \\ -2,039 \\ \hline \end{array}$ |
| 3 | $\begin{array}{r} 2,284 \\ -2,159 \\ \hline \end{array}$ | $\begin{array}{r} 9,352 \\ -3,673 \\ \hline \end{array}$ | $\begin{array}{r} 6,833 \\ +2,960 \\ \hline \end{array}$ | $\begin{array}{r} 48,956 \\ -27,680 \\ \hline \end{array}$ | $\begin{array}{r} 43,276 \\ +592,037 \\ \hline \end{array}$ | $\begin{array}{r} 630,017 \\ -54,260 \\ \hline \end{array}$ |
| 4 | $\begin{array}{r} 40,352 \\ -36,064 \\ \hline \end{array}$ | $\begin{array}{r} 57,293 \\ +65,296 \\ \hline \end{array}$ | $\begin{array}{r} 938,774 \\ -625,803 \\ \hline \end{array}$ | $\begin{array}{r} 629,274 \\ +13,492 \\ \hline \end{array}$ | $\begin{array}{r} 268,934 \\ -145,089 \\ \hline \end{array}$ | $\begin{array}{r} 865,733 \\ -453,924 \\ \hline \end{array}$ |

5 Bigg City has a population of 349,673. When Bigg College is in session, the population jumps to 398,412. How many people go to Bigg College?

6 During summer school at Bigg College, 2,948 students stay to take classes. 835 students stay to work. How many students stay during the summer?
