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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 _____

Subtraction—Regrouping

27

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.

$$\begin{array}{r} 47 \\ -18 \\ \hline 29 \end{array}$$

$$\begin{array}{r} 57 \\ -28 \\ \hline 29 \end{array}$$

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 no	28	yes no	43	yes no	57	yes no
2	$\begin{array}{r} 80 \\ -57 \\ \hline \end{array}$ yes no	52	yes no	71	yes no	63	yes no
3	$\begin{array}{r} 32 \\ -23 \\ \hline \end{array}$ yes no	87	yes no	35	yes no	46	yes no
4	$\begin{array}{r} 23 \\ -5 \\ \hline \end{array}$ yes no	30	yes no	51	yes no	72	yes no
5	$\begin{array}{r} 46 \\ -37 \\ \hline \end{array}$ yes no	60	yes no	56	yes no	32	yes no

skill practice

Name _____

Addition and Subtraction

31

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	$\begin{array}{r} 21 \\ +38 \\ \hline \end{array}$	$\begin{array}{r} 74 \\ +14 \\ \hline \end{array}$	$\begin{array}{r} 58 \\ +60 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ +42 \\ \hline \end{array}$	$\begin{array}{r} 35 \\ +22 \\ \hline \end{array}$	$\begin{array}{r} 26 \\ +53 \\ \hline \end{array}$
5	$\begin{array}{r} 98 \\ -53 \\ \hline \end{array}$	$\begin{array}{r} 84 \\ -50 \\ \hline \end{array}$	$\begin{array}{r} 44 \\ -42 \\ \hline \end{array}$	$\begin{array}{r} 67 \\ -37 \\ \hline \end{array}$	$\begin{array}{r} 78 \\ -53 \\ \hline \end{array}$	$\begin{array}{r} 40 \\ -50 \\ \hline \end{array}$
6	$\begin{array}{r} 342 \\ +204 \\ \hline \end{array}$	$\begin{array}{r} 732 \\ +253 \\ \hline \end{array}$	$\begin{array}{r} 63 \\ +216 \\ \hline \end{array}$	$\begin{array}{r} 834 \\ +155 \\ \hline \end{array}$	$\begin{array}{r} 900 \\ -98 \\ \hline \end{array}$	$\begin{array}{r} 365 \\ -533 \\ \hline \end{array}$
7	$\begin{array}{r} 735 \\ -314 \\ \hline \end{array}$	$\begin{array}{r} 839 \\ -638 \\ \hline \end{array}$	$\begin{array}{r} 956 \\ -433 \\ \hline \end{array}$	$\begin{array}{r} 648 \\ -421 \\ \hline \end{array}$	$\begin{array}{r} 597 \\ -304 \\ \hline \end{array}$	$\begin{array}{r} 475 \\ -333 \\ \hline \end{array}$

problem solving

Name _____

Multiplication

43

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 above.

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	$\begin{array}{r} 19 \\ \times 3 \\ \hline \end{array}$	$\begin{array}{r} 36 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 47 \\ \times 2 \\ \hline \end{array}$	$\begin{array}{r} 152 \\ \times 9 \\ \hline \end{array}$	$\begin{array}{r} 261 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 350 \\ \times 2 \\ \hline \end{array}$
3	$\begin{array}{r} 428 \\ \times 2 \\ \hline \end{array}$	$\begin{array}{r} 579 \\ \times 3 \\ \hline \end{array}$	$\begin{array}{r} 920 \\ \times 5 \\ \hline \end{array}$	$\begin{array}{r} 327 \\ \times 7 \\ \hline \end{array}$	$\begin{array}{r} 206 \\ \times 3 \\ \hline \end{array}$	$\begin{array}{r} 713 \\ \times 6 \\ \hline \end{array}$
4	$\begin{array}{r} 179 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 803 \\ \times 1 \\ \hline \end{array}$	$\begin{array}{r} 263 \\ \times 3 \\ \hline \end{array}$	$\begin{array}{r} 3917 \\ \times 5 \\ \hline \end{array}$	$\begin{array}{r} 5782 \\ \times 6 \\ \hline \end{array}$	$\begin{array}{r} 1429 \\ \times 5 \\ \hline \end{array}$

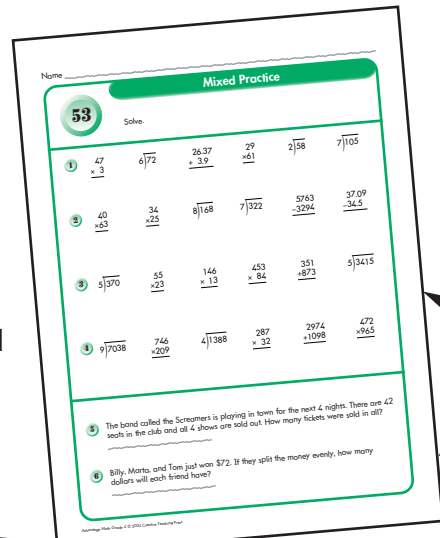
5 At Panchito's Restaurant, 310 burritos are sold each year. Panchito's has been open for 5 years. How many burritos have been sold since Panchito's opened?

6 Plane tickets 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

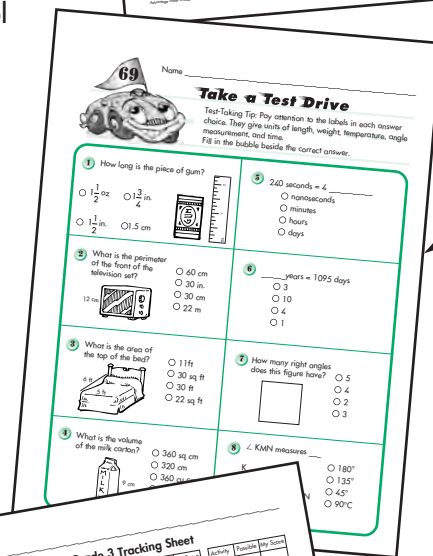
- **Mixed-practice pages** include a variety of math concepts on one workbook page. This challenges students to think through each problem rather than rely on a predictable format.



mixed practice

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.



test-taking format

Answer Key

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

Activity		Possible Points	Points	Activity		Possible Points	Points	Activity		Possible Points	Points
Unit 1				Unit 2				Unit 3			
1	8			5	20			53	12		
2	10			6	20			54	10		
3	10			7	20			55	8		
4	18			8	20			56	8		
5	26			9	20			57	8		
6	19			10	20			58	8		
7	19			11	20			59	8		
8	20			12	20			60	10		
9	21			13	20			61	9		
10	24			14	20			62	4		
11	8			15	20			63	8		
12	8			16	20			64	8		
Unit 7				Unit 8				Unit 8			
13	30			17	20			65	9		
14	38			18	20			66	9		
15	27			19	20			67	9		
16	27			20	20			68	7		
17	20			21	20			69	6		
18	30			22	20			70	6		
19	18			23	20			71	5		
20	30			24	20			72	7		
21	8			25	20			73	7		
22	8			26	20			74	6		
23	30			27	20			75	8		
24	36			28	20			76	8		
25	27			29	20			77	7		

tracking sheet

Name _____

Word Names and Standard Numerals

1

Millions			Thousands			Ones				
Hundreds	Tens	Ones	Hundreds	Tens	Ones	Hundreds	Tens	Ones		
		2	,	5	7	8	,	2	7	2

★ Use this chart to help you write and read large numbers. Large numbers are arranged into groups of 3 places separated by commas. This number is read as “two million, five hundred seventy-eight thousand, two hundred seventy-two.”

Write these numbers in word form.

- 1 5,093,185 _____
- 2 7,431,050 _____
- 3 4,830,004 _____

★ A place value chart is also useful in reading and writing decimals. How do we read 3.041? This number is read as “three and forty-one thousandths.”

Ones	Tenths	Hundredths	Thousandths	
3	.	0	4	1

Write these decimals in word form.

- 4 0.023 _____
- 5 3.59 _____
- 6 2.607 _____

$2\frac{1}{5}$ is the same as two and one-fifth. Write these fractions in word form.

- 7 $4\frac{3}{8}$ _____
- 8 $2\frac{1}{6}$ _____
- 9 $\frac{12}{13}$ _____

Standard Form and Expanded Form

2

Millions			Thousands			Ones		
Hundreds	Tens	Ones	Hundreds	Tens	Ones	Hundreds	Tens	Ones
		8	7	5	0	3	0	0

★ 8,750,300 is a number expressed in **standard form**. In **expanded form**, this number is written as $(8 \times 1,000,000) + (7 \times 100,000) + (5 \times 10,000) + (3 \times 100)$.

0.093 is read as “ninety-three thousandths.” In **expanded form**, this decimal is written as $(9 \times 0.01) + (3 \times 0.001)$.

Ones	Tenths 0.1	Hundredths 0.01	Thousandths 0.001
0	.	9	3

Write each number in expanded form.

- 1 2,305,467 _____
- 2 10.49 _____
- 3 5,413.2 _____
- 4 0.054 _____

Write each number in standard form.

- 5 $7,000,000 + 80,000 + 5,000 + 600 + 20 + 9$ _____
- 6 $4,000 + 700 + 8 + 0.4$ _____
- 7 8 thousand, fifty, and 9 hundredths _____
- 8 forty-seven thousandths _____

9 Write a decimal in standard and expanded form for a number that has a 2 in the tenths place, an 8 in the thousandths place, and a 6 in the hundredths place.

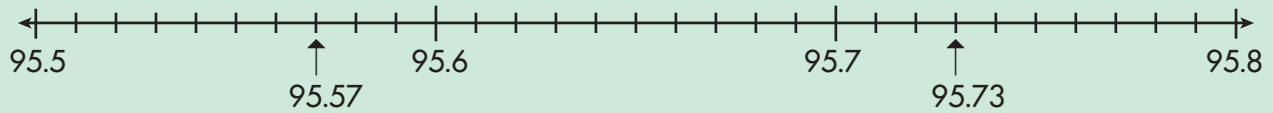
Name _____

Compare and Order

3

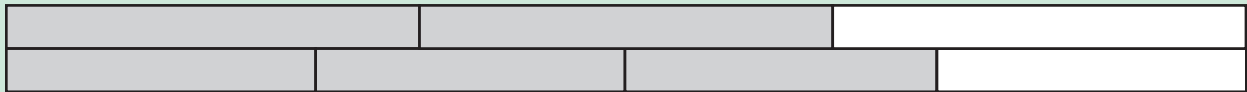


A number line can be used to compare decimals.



Since 95.73 is to the right of 95.57, you know that 95.73 is the higher number.

The Smith family home was on $\frac{2}{3}$ of an acre of land, while the Gonzalez home was on $\frac{3}{4}$ of an acre of land. Which family had the larger property?



Looking at the fraction bar, you can see that $\frac{3}{4}$ is more than $\frac{2}{3}$, so the Gonzalez family had a larger property than the Smith family.

Use the fraction bar to solve the problem.

1

Elephants use their trunks to lift heavy objects. One elephant might lift a log weighing $\frac{3}{10}$ of a ton. Another elephant could lift a rock weighing $\frac{1}{5}$ of a ton. Does the log or the rock weigh more? Explain your answer.

Compare and Order

4

- ★ When comparing decimals, line up the decimal points, and look for the first place where the digits are different. If there are whole numbers, start to the left of the decimal point.

$0.012 \bigcirc 0.014$ Since the tenths and hundredths places are the same, compare the thousandths place. Since 4 is larger than 2, $0.012 < 0.014$.

- ★ When comparing fractions, find the least common denominator of each fraction. Then compare the numerators. $\frac{2}{3} \bigcirc \frac{1}{2}$ $\frac{2}{3} \times \frac{2}{2} = \frac{4}{6}$ $\frac{1}{2} \times \frac{3}{3} = \frac{3}{6}$ Since 4 is greater than 3, $\frac{4}{6}$ is greater than $\frac{3}{6}$. So, $\frac{2}{3} > \frac{1}{2}$

- ★ When you compare percents, follow the same steps as when you compare whole numbers. The larger the number, the greater the percent.

Order these numbers from least to greatest.

1 2.098, 3.089, 2.980, 2.908 _____

2 0.013, 0.301, 0.103, 0.031 _____

3 0.871, 0.187, 0.781, 0.817 _____

Use the symbols $<$ and $>$ to compare these fractions.

4 $\frac{3}{5} \bigcirc \frac{4}{7}$

$\frac{4}{9} \bigcirc \frac{3}{8}$

$\frac{2}{3} \bigcirc \frac{3}{4}$

Circle the greater percent in each pair.

5 48% 84%

63% 36%

49% 92%

6 55% 45%

90% 99%

10% 100%