Table of Contents

Introduction	4	Averages, Operations, Equations, and Numb	ers
Common Core State Standards Correlation	5	Averages	38
Student Practice Pages		Inverse Operations and Checking Answers	39
Numbers		Order of Operations	40
Numbers to One Million	7	Order of Operations with Decimals and Fractions	41
Place Value	8	Mixed Operations	42
Numbers Greater than One Million	9	Zero in Operations	43
Number Patterns	10	Equations	44
Expanding Numbers	11	Operations with Money	45
Roman Numerals	12	Equations with Numbers and Words	46
Addition, Subtraction, and Rounding		Substituting Values	47
Addition Review	13	Number Sentences	48
Adding to 999,999	14	Square and Cube Numbers	49
Adding Large Numbers	15	Working with Numbers	50
Subtraction Review	16	Negative Numbers	51
Rounding Numbers	17	Prime and Composite Numbers	52
Subtraction to 999,999	18	Fractions	
Subtracting Large Numbers	19	Fractions	53
Estimation and Multiplication		Fraction of a Group	54
Estimation	20	Equivalent Fractions	55
Basic Multiplication	21	Improper Fractions and Mixed Numbers	56
Multiplication Review	22	Using Fractions	
Multiplication of Tens, Hundreds, and Thousands	23	Fraction Addition	58
Multiplication	24	Fraction Subtraction	59
Multiplication by 2-Digit Numbers	25	Fraction Addition and Subtraction	60
Extended Multiplication	26	Fraction Multiplication	61
Multiples, Factors, and Divisibility	27	Decimals	
Estimating Products	28	Decimal Place Value — Thousandths	62
Division		Decimal Addition	63
Division Practice	29	Decimal Subtraction	64
Division Review	30	Decimal Multiplication	65
Division with Remainders	31	Decimal Division	66
Division with Remainders — Fractions	32	Multiplication and Division of Decimals	67
Division Involving Zeros	33	Review of Decimal Operations	68
Division with Zeros in the Divisor	34	Fractions and Decimals	69
Division by Numbers with Zeros	35	Rounding Decimals	70
Division of Numbers Larger than 999	36	Percentages and Money	
Extended Division	37	Percentages	71
		Fractions, Decimals, and Percentages	72

Table of Contents

Money in Shopping	73	Length	
Symmetry		Length in Inches, Feet, Yards, and Miles	100
Symmetry	74	Converting Metric Lengths	104
Rotational Symmetry	75	Perimeter and Area	
Lines and Angles		Perimeter	10
Diagonals, Parallel, and Perpendicular Lines	76	Area of Squares and Rectangles	106
Parallel, Horizontal, and Vertical Lines	77	Area of Rectangles and Triangles	107
Angles	78	Weight and Volume	
Reading Angles	79	Weight in Ounces, Pounds, and Tons	108
Drawing Angles	80	Volume	109
Triangles	81	Cubic Centimeters	11(
3D Objects		Probability and Predicting	
3D Objects	82	Probability and Arrangements	11 ⁻
Drawing 3D Objects	83	Predicting	112
Properties and Views of 3D Objects	84	Tables and Graphs	
Cylinders, Spheres, and Cones	85	Tables and Graphs	113
Nets and 3D Objects	86	Divided Bar Graphs	114
2D Shapes		Pie Charts	11
Parallelograms and Rhombuses	87	Mean, Median, and Graphs	116
Geometric Patterns	88	Divided Bar Graphs and Pie Charts	117
Circles	89	Line Graphs	118
Scale Drawings and Movement of Shapes		Tally Marks and Graphs	119
Scale Drawings	90	Reading Graphs	120
Tessellation and Shape Movement	91	Collected Data	12 ⁻
Position and Maps		Problem Solving and Practice	
Compass Directions	92	Problem Solving — Inverse Operations	122
Maps	93	Problem Solving — Money	123
Drawing a Map	94	Problem solving — Critical Thinking	124
Coordinates	95	Addition and Subtraction Practice	12
Time and Traveling Speed		Multiplication and Division Practice	126
Analog Time	96	Fractions Practice	127
Digital Time	97	Decimals Practice	128
Digital and Analog Time	98	Answer Key	129
Stopwatches	99		
Time Lines and Timetables	100		
Time Zones	101		
Traveling Speed	102		

Division Review



a.	4	boys.	

b.
$$450 \div 5 =$$

c.
$$240 \div 6 =$$

d.
$$350 \div 7 =$$

d.
$$350 \div 7 =$$
 _____ **e.** $400 \div 8 =$ _____ **f.** $360 \div 9 =$ _____

f.
$$360 \div 9 =$$

	Question	Quotient	Remainder
	20 ÷ 3	6	2
a.	30 ÷ 4		
b.	51 ÷ 7		
C.	38 ÷ 4		
d.	40 ÷ 9		
e.	55 ÷ 10		
f.	63 ÷ 6		

6 Complete the table by finding the missing number in each division question.

	Question	Quotient	Remainder
a.	÷ 6	5	2
b.	÷ 8	1	6
c.	÷ 3	9	1
d.	÷ 7	8	4

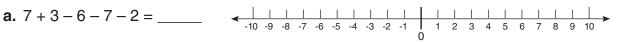
6	Write a division	word problem	that has a c	nuntient of 7
\mathbf{O}	vviile a division	word problem	mai nas a c	juolieni oi 7.

Negative Numbers



- Place each set of numbers in ascending order.
 - **a.** 3, -3, 1, -5, 0, -2, -1, 4, 6 _____
 - **b.** -10, 1, -5, 0, 2, 5, -3, -1, 6 _____
 - **c.** 2, 4, 0, -2, -4, -6, 6
- Place each set of numbers in descending order.
 - **a.** -1, -3, 5, 0, 3, -5, 1, 7 _____
 - **b.** -20, 10, 20, -30, -15, -10, 0, 5 _____
 - **c.** 19, 18, 14, 13, 0, -10, 15, -15, -13, -6 _____
- 3 On June 30th, the temperature was 85°F. What would the temperature be on July 1st if
 - a. 4 degrees warmer? _____
- **b.** 5 degrees cooler? _____
- c. 2 degrees colder? _____
- d. 10 degrees hotter? _____
- e. 7 degrees colder? _____
- f. 11 degrees colder? _____
- Adam had \$25 in his bank account. What would his bank balance be if he wrote a check for:
 - **a.** \$20? _____ **b.** \$17? _____ **c.** \$25? _____

- **d.** \$30? _____ **e.** \$49? ____ **f.** \$82? ____
- Display each "jump" in the following equations on the number lines to solve each one.









6 Solve each equation.

a.
$$-10 + 10 - 7 + 7 + 3 =$$

b.
$$0 - 2 + 5 + 6 =$$

c.
$$-2 + 3 - 8 - 2 + 1 =$$

d.
$$5 - 2 - 6 + 4 + 1 =$$

Fractions and Decimals

Write the decimal for each of the following fractions.

a.
$$\frac{63}{100} =$$

b.
$$\frac{246}{1,000} =$$
 c. $\frac{8}{10} =$

c.
$$\frac{8}{10} =$$

d.
$$\frac{9}{100} =$$

e.
$$\frac{42}{1,000}$$
 = _____

f.
$$\frac{6}{10} =$$

Write the fraction for each of the following decimals.

3 Find the decimal for the following fractions.

a.
$$\frac{1}{5} =$$

b.
$$\frac{1}{20} =$$

c.
$$\frac{3}{4} =$$

d.
$$\frac{1}{8} =$$

e.
$$\frac{3}{5} =$$

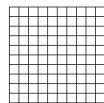
a.
$$\frac{1}{5} =$$
 ______ **b.** $\frac{1}{20} =$ ______ **c.** $\frac{3}{4} =$ ______ **d.** $\frac{1}{8} =$ ______ **f.** $\frac{3}{8} =$ ______

4 Complete the table to show the fraction and decimal that represents the shaded part of the hundred square.

	Hundred Square	Fraction of 100	Decimal	
a.				
b.				
c.				

	Hundred Square	Fraction of 100	Decimal
d.			
e.			
f.			

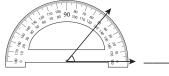
- **5** a. In a basketball game, the home team made 56 out of 100 shot attempts. Write the decimal that represents the home team's **missed** shot attempts.
 - **b.** In a swimming race, the difference between the winning time and the second-place time was 0.123 seconds. Write this difference as a fraction.
- Shade the hundred square to show $\frac{6}{10}$.



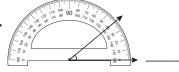
Angles



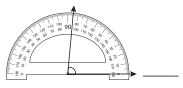




b.



C.



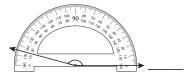
d.



e.



f.

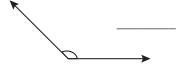


Use a protractor to measure each of the following to the nearest degree.

a.

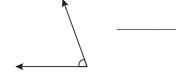








f.



Circle the acute angles.







d.





4 Circle the obtuse angles.

a.











Circle the right angles.

a.









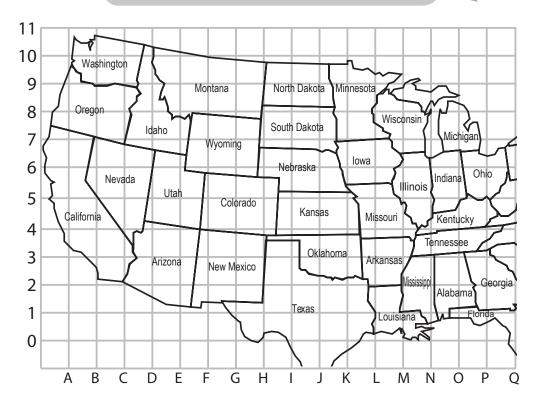


f.



6 Measure with a protractor to find the smallest angle between the clock hands.

Coordinates



- Name the state that is located at the following coordinates on the grid.
- **b.** G3 _____ **c.** C6 _____
- Give the coordinates for the following states, where each state name mostly appears.
 - **a.** lowa _____
- **b.** Oregon _____ **c.** Alabama _____
- Give the main direction to:
 - a. Utah from Arizona.
- **b.** North Dakota from Montana.
- **c.** Arkansas from Louisiana.
- d. Ohio from Kentucky. _____

- Give the state that is:
 - a. west of Idaho.
- **b.** north of Illinois. _____
- c. east of Louisiana.
- d. south of Kentucky.
- **5** Tell which state you would be in if you started at:
 - a. J5 and traveled north 4 lines._____
 - **b.** C9 and traveled east 8 lines.
 - c. P6 and traveled south 4 lines.
- On the back of this paper list the states that you would travel through, in order, if you left California and took the shortest route to Louisiana.

Table of Contents

Introduction	Statistics & Probability
	Statistical Questions 53
How to Use This Book 4	Displaying Numerical Data 57
The Number System	Understanding Data Sets 61
GCF & LCM	Examining Data Sets 65
Distributive Property 9	Ratios & Proportional Relationships
Positive & Negative Numbers 13	Ratios
Rational Numbers	Rate Language
Ordered Pairs	Function Machines
	Unit Rate Problems 81
Absolute Value 25	Finding Percents
Finding Distance 29	Ratio Reasoning
Expressions & Equations	& Measurement Conversions 89
Exponents	Geometry
Evaluating Expressions	Finding Volume with Unit Cubes 93
	Finding Surface Area 97
Equivalent Expressions 41	15 11
Using Substitution	Word Problems
to Solve Problems 45	Solving Word Problems
Writing Inequalities 49	Answer Key

Name: _____

Finding Distance

We know how to locate ordered pairs on a coordinate plane.

We know that absolute value is how far a number is from 0.

$$|3| = 3$$

We can use this knowledge to find the distance between points with the same first coordinate or the same second coordinate.

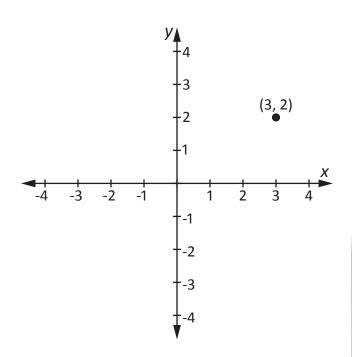
When the points are in the same quadrant, we subtract the absolute value of the coordinate that is different.

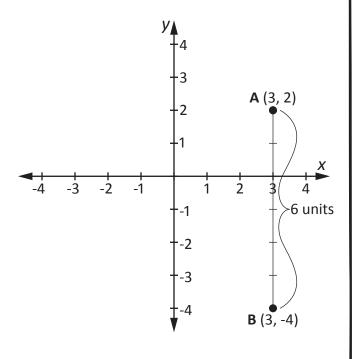
When the points are in different quadrants, we add the absolute value of the coordinate that is different.

For example, to find the distance between point A and point B, first we determine that they're in different quadrants. Since they are in different quadrants, we must add the absolute values of the y-coordinates.

$$2 + 4 = 6$$

Point A and Point B are 6 units away from each other.





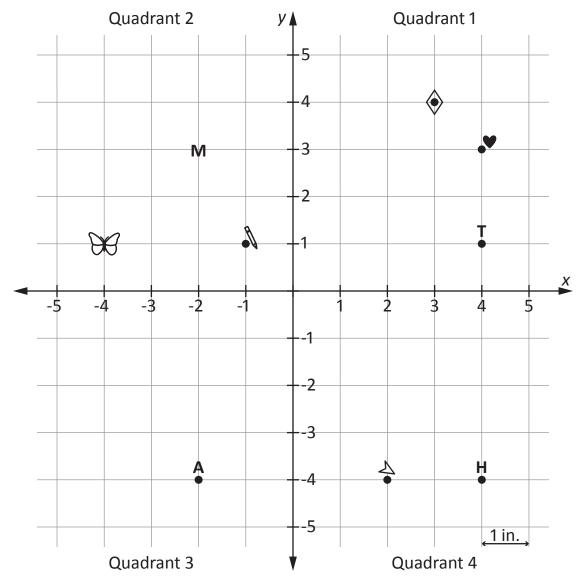
The Number System

PARTNER & PRACTICE

Name:

Finding Distance

Work with your partner to solve these practice problems.



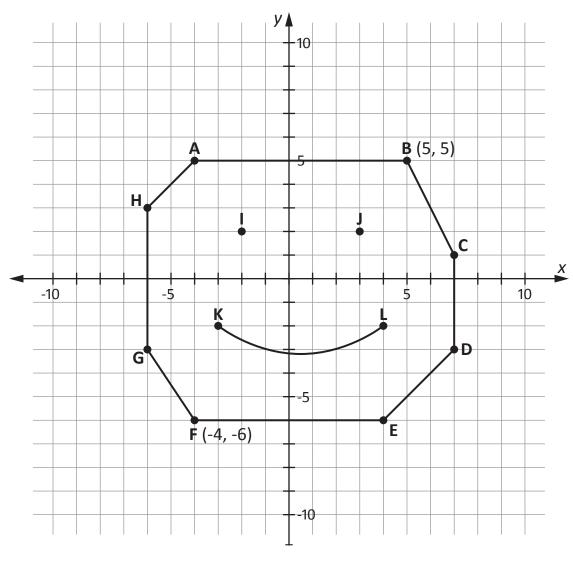
- 1. How far is it from point M to point A? _____ inches
- 2. How far is it from point M to the heart? _____ inches
- 3. How far is it from the heart to point T? _____ inches
- **4.** Using absolute value, find the distance between the airplane (△) and point A. Show your work below.

FOCUS & FIND

Name: _____

Finding Distance

Focus on what you learned. Find the answers.



- 1. How far is it from point I to point J?
- 2. How far is it from point A to point F? _____
- **3.** Can you find the distance between point F and point G using absolute value? Why, or why not?
- **4.** The coordinates for point B are (5, 5). What other letter shares the same
- *x*-coordinate? _____ What about the same *y*-coordinate? _____

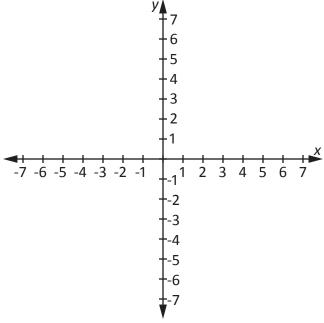
The Number System

THINK & WRITE

Name: _____

Finding Distance

Think about finding the distance between points. Write about what you learned.



1. Martino plots (-3, 4) on a coordinate plane. He wants to add a point that is 8 units away. What are two different possible coordinates he can choose?

2. Adia knows she can use absolute value to calculate the distance between two ordered pairs that share the same *y*-coordinate. She wants to find the distance between (-6, 5) and (-9, 5). Should she add or subtract the absolute value of the *x*-coordinate? Why? What is the distance?

3. When it comes to finding distance, I find it (easy/difficult) to _______
because _____