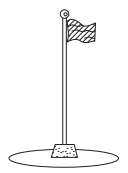
Activity Page

The *Student Activity Page* uses pictures and instructional graphics to connect hands-on activities with more abstract representations of the math concept.

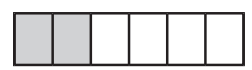
Find the Pattern

Pedro and Sam both walk to school.
Sam lives $\frac{1}{3}$ of a mile from school.
Pedro lives $\frac{2}{6}$ of a mile from school.
Who lives closer to school?



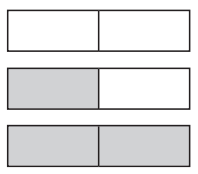
Use fraction bars to decide.

$\frac{1}{3}$ 

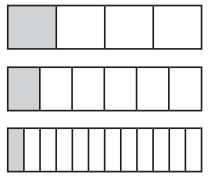
$\frac{2}{6}$ 

$\frac{1}{3}$ and $\frac{2}{6}$ have the same parts shaded. The distances are _____.

These fraction bars have been sorted into groups by some way they are alike or similar. Guess the similarity.

1. 

Similarity: _____

2. 

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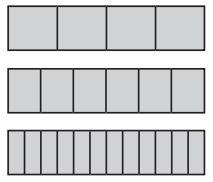
3. 

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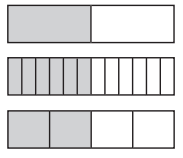
4. 

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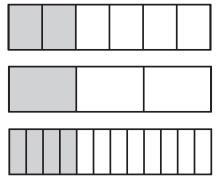
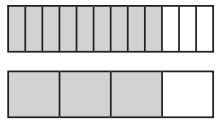
5. 

Similarity: _____

6. 

Similarity: _____

SE

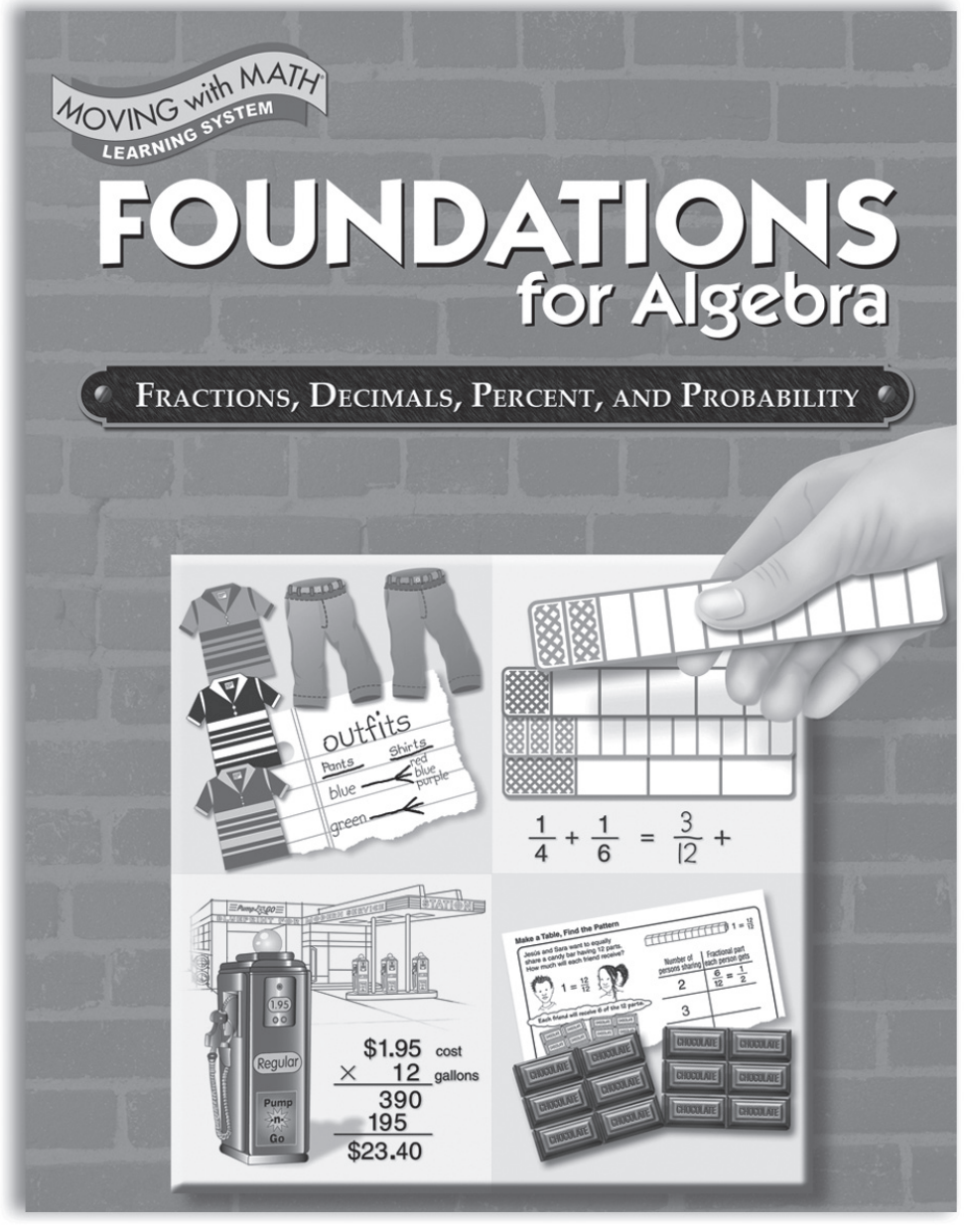
KEY LESSONS

Using the *Moving with Math*® Learning System

Foundations for Algebra IM2

Fractions, Decimals, Percent, and Probability

Student Book



Lesson 1

Review 1 (in the back of the Student Book)

Objective: To introduce the concept of a fraction as a whole divided into parts of equal size. To name the fractional part of a set. To relate a fraction to a division problem. To show that fractional parts need not be congruent. To name fractions from fraction bars. To identify similarities and differences among fraction bars.

Materials: Clay, scored crackers, zippered bags, geoboards, overhead geoboard, Fraction Bars®, overhead Fraction Bars® (optional), Student Math Glossary (Master 15), Vocabulary Cards (Master 16)

Lesson Plan pages: 2-4

Student Book pages: 2-4

Skill Builders 11-1, 11-2, 11-3, 11-6 (Make copies from the *Skill Builders* section of this Teacher Manual)

What's My Secret game, Lesson Plans p. 4

Journal Prompt, Student Book p. 3

Test Prep, Student Book p. 2

Daily Reviews

Each day begins with a 5-question Daily Review found at the end of the Student Book. Students record results on the back inside cover of their books.

Name _____

Daily Review

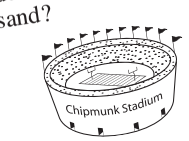
1. What digit is in the ten millions place? 2 (Obj. 1)

321,856,470

2. Write the number for the words in the box. 354,700 (Obj. 2)

three hundred fifty-four thousand seven hundred

3. A stadium sold 17,350 tickets to a baseball game. What is this number rounded to the nearest thousand? 17,000 (Obj. 3)



X Write as a standard numeral.

$7^2 = \square$ 14 (Obj. 4)

5. What number goes in the box?

$(3 \times 2) \times 5 = 3 \times (\square \times 5)$ 2 (Obj. 5)

Review 1

Name _____

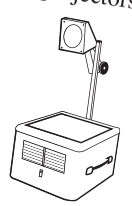
Daily Review

1. Solve.

$365 + 42{,}180 + 6214 + 5 = \square$ 48,764 (Obj. 6)

2. The Hales want to save $1275 for a family vacation. So far they have saved $638. How much do they have left to save? 637 (Obj. 7)

3. A school bought 22 projectors. Each projector cost $245. How much did the school spend on projectors? 5,390 (Obj. 8)



ntains 84 gumdrops. ds share the gumdrops, will each friend get? 12 (Obj. 9)

78 (Obj. 10)

v 2

IM2 Daily Reviews

Record the results from your Daily Reviews here. "Obj." shows which objective that problem covered.

	Review 1		Review 2	Review 3	Review 4	Check 1 Point	
1	Obj. 1 (SB 1-1)		Obj. 6 (SB 6-1)	Obj. 43 (SB 43-1)	Obj. 45 (SB 45-6)	1 Obj. 11 (SB 11-1)	6 Ob
2	Obj. 2 (SB 2-1)		Obj. 7 (SB 7-1)	Obj. 44 (SB 44-1)	Obj. 46 (SB 46-1)	2 Obj. 11 (SB 11-2)	7 Ob
3	Obj. 3 (SB 3-1)		Obj. 8 (SB 8-1)	Obj. 11 (SB 11-1)	Obj. 11 (SB 11-4)	3 Obj. 11 (SB 11-3)	8 Ob
4	Obj. 4 (SB 4-1)	X	Obj. 9 (SB 9-1)	Obj. 11 (SB 11-2)	Obj. 12 (SB 12-1)	4 Obj. 11 (SB 11-4)	9 Ob
5	Obj. 5 (SB 5-1)		Obj. 10 (SB 10-1)	Obj. 11 (SB 11-3)	Obj. 12 (SB 12-1)	5 Obj. 11 (SB 11-4)	10 Ob
	# Correct		# Correct	# Correct	# Correct		

	Review 6	Review 7	Review 8	Review 9	Check 2	
1	Obj. 49 (SB 49-1)	Obj. 50 (SB 50-1)	Obj. 56 (SB 56-1)	Obj. 59 (SB 59-1)	1 Obj. 13 (SB 13-2)	6 Ob
	[illegible]	Obj. 13 (SB 13-2)	Obj. 16 (SB 16-2)	Obj. 13 (SB 13-4)	2 Obj. 14 (SB 14-2)	7 Ob
	[illegible]	[illegible]	Obj. 16 (SB 16-2)	Obj. 17 (SB 17-2)	3 Obj. 15 (SB 15-1)	8 Ob
	[illegible]	[illegible]	(SB 13-4)	Obj. 17 (SB 17-1)	4 Obj. 16 (SB 16-1)	9 Ob
	[illegible]	[illegible]	(SB 17-1)	Obj. 17 (SB 17-3)	5 Obj. 16 (SB 16-2)	10 Ob
	[illegible]	[illegible]	# Correct	# Correct		

	Review 13	Review 14	Check 3	
	(SB 5-2)	Obj. 45 (SB 45-4)	1 Obj. 18 (SB 18-4)	6 Ob
	19 (SB 19-3)	Obj. 19 (SB 19-3)	2 Obj. 45 (SB 45-3)	7 Ob
	19 (SB 19-2)	Obj. 19 (SB 19-2)	3 Obj. 19 (SB 19-1)	8 Ob
	19 (SB 19-3)	Obj. 20 (SB 20-2)	4 Obj. 19 (SB 19-3)	9 Ob
	20 (SB 20-1)	Obj. 45 (SB 45-9)	5 Obj. 19 (SB 19-3)	10 Ob
	# Correct	# Correct		

	Review 18	Review 19	Check 4	
	Obj. 21 (SB 21-2)	Obj. 22 (SB 22-1)	1 Obj. 21 (SB 21-2)	6 Ob
	Obj. 21 (SB 21-1)	Obj. 25 (SB 25-2)	2 Obj. 22 (SB 22-1)	7 Ob
	Obj. 23 (SB 23-1)	Obj. 25 (SB 25-1)	3 Obj. 21 (SB 21-1)	8 Ob
	Obj. 23 (SB 23-2)	Obj. 4 (SB 4-3)	4 Obj. 23 (SB 23-2)	9 Ob
	Obj. 22 (SB 22-1)	Obj. 24 (SB 24-1)	5 Obj. 25 (SB 25-2)	10 Ob
	# Correct	# Correct		

	Review 23	Review 24	Check 5	
	Obj. 26 (SB 26-2)	Obj. 27 (SB 27-2)	1 Obj. 51 (SB 51-2)	6 Ob
	Obj. 26 (SB 26-4)	Obj. 45 (SB 45-5)	2 Obj. 26 (SB 26-3)	7 Ob
	Obj. 27 (SB 27-1)	Obj. 28 (SB 28-1)	3 Obj. 26 (SB 26-4)	8 Ob
	Obj. 27 (SB 27-2)	Obj. 28 (SB 28-2)	4 Obj. 27 (SB 27-2)	9 Ob
	Obj. 27 (SB 27-3)	Obj. 28 (SB 28-3)	5 Obj. 27 (SB 27-3)	10 Ob
	# Correct	# Correct		

Record results of Daily Reviews by marking an "X" next to questions/objectives. Write the ***total correct*** for each Daily R the space provided. For practice related to missed objectives designated *Skill Builders* practice page (in the Skill Builder se of the Teacher Manual).

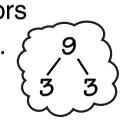
Name _____

Name _____

Reading and Evaluating Numbers in Exponential Form

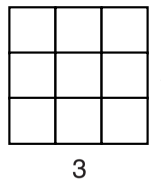
Fran's study group is trying to find the prime factors of 9 and write them in exponential form if possible.

They find the prime factors of 9 using a factor tree. Prime Factors: 3, 3



They are multiplying the same factor more than once: 3×3

Fran can write the factors in exponential form:

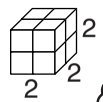


The base is the repeated factor.

$3 \times 3 = 3^2$

The exponent is the number of repetitions.

3^2 is read "3 to the second power" or "3 squared."



2 is multiplied 3 times

$2 \times 2 \times 2 = 2^3$
2^3 is read "two to the third power" or "two cubed."

$2 \times 2 \times 2 \times 2 = 2^4$
2^4 is read "two to the fourth power."

2 is multiplied 4 times

$2 \times 2 \times 2 \times 2 \times 2 = 2^5$
2^5 is read "two to the fifth power."

2 is multiplied 5 times

Write the numeral in exponential form.

1. 3 to the fifth power = _____
2. 5 squared = _____
3. 4 to the second power = _____
4. 6 to the fourth power = _____
5. 7 cubed = _____
6. 8 squared = _____

Write the words for each expression.

7. 4^3 = _____
8. 10^2 = _____
9. 10^3 = _____
10. 5^4 = _____
11. 6^5 = _____
12. 3^2 = _____

Write the factored form and evaluate.

13. 10^4 = ___ × ___ × ___ × ___ = ___
14. 5^4 = _____ = ___
15. 6^3 = _____ = ___
16. 3^3 = _____ = ___
17. 2^5 = _____ = ___
18. 5^2 = _____ = ___
19. 8^2 = _____ × _____ = ___
20. 7^3 = _____ = ___