Name _____ Date _____ Period _____

Lesson 6-10

Reinforce Understanding

Divide Mixed Numbers

I can divide mixed numbers by first changing them to improper fractions.

Worked model

Agent Chen has a 3 1/2-mile route cut into 1/4-mile segments. I want 3 1/2 ÷ 1/4.

1. First I convert 3 1/2. Multiply the whole by the bottom: 3 × 2 = 6. Add the top: 6 + 1 = 7. So 3 1/2 = 7/2.
2. Now Keep, Change, Flip: keep 7/2, change ÷ to ×, flip 1/4 to 4/1.
3. Multiply: 7/2 × 4/1 = 28/2.
4. Simplify: 28/2 = 14. So 3 1/2 ÷ 1/4 = 14 segments.

Practice

Complete each exercise. Show the reasoning that supports your answer.

1. Convert each mixed number to an improper fraction.

Complete the table. Show how you found each value.

Mixed Number	Improper Fraction
1 3/4	
2 2/3	
4 1/2	
3 1/5	

Show your work

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2. What is 1 1/2 ÷ 3/4?

Circle the letter of the best answer. Show how you know.

A. 1 1/8
B. 2
C. 3/4
D. 9/8

Show your work

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3. What is 2 1/4 ÷ 3/4?

Circle the letter of the best answer. Show how you know.

A. 1 1/2
B. 2 1/3
C. 3
D. 9/16

Show your work
