

## Grade 5 Unit 3 - Multiplying and Dividing Fractions

### Section A - Lessons 1-9

#### Unit Goal:

- Students extend multiplication and division of whole numbers to multiply fractions by fractions and divide a whole number and a unit fraction.
- [Grade 5 Unit 3 I Can Statements](#)
- [Grade 5 Unit 3 Centers](#)
- [Unit 3- Extra Practice Problems](#)

#### Section A Goals:

- Recognize that  $\frac{a}{b} \times \frac{c}{d} = \frac{a \times c}{b \times d}$  and use this generalization to multiply fractions numerically.
- Represent and describe multiplication of a fraction by a fraction using area concepts.

*\*Lessons/resources denoted with an asterisk are Desmos activities*

IM Lesson	L1: One Piece of One Part	L2: Represent Unit Fractions	L3: Multiply Unit Fractions	L4: Situations about Multiplying Fractions	L5: Multiply a Unit Fraction by a Non-unit Fraction
AMSS	<b>5.NF.B.4.a</b>	<b>5.NF.B.4.a</b>	<b>5.NF.B.4.a</b>	<b>5.NF.B.4.a</b>	<b>5.NF.B.4.a</b>
Student Practices	MP2	MP7	MP7, MP8	MP2, MP3	MP7
Accessibility Supports	Action and Expression, MLR2	Representation	Engagement	Action and Expression, MLR8	Action and Expression, MLR8
Vocabulary					
Lesson Resources	<a href="#">L1 - Slide Deck</a> <a href="#">L1 - Student Tasks*</a>	<a href="#">L2 - Slide Deck</a> <a href="#">L2 - Student Tasks*</a>	<a href="#">L3 - Slide Deck</a> <a href="#">L3 - Student Tasks*</a>	<a href="#">L4 - Slide Deck</a> <a href="#">L4 - Student Tasks*</a>	<a href="#">L5 - Slide Deck</a> <a href="#">L5 - Student Tasks*</a>
Assessment	<a href="#">Cool Down*</a> <a href="#">Pre-Unit Practice Problems</a>	<a href="#">Cool Down*</a>	<a href="#">Cool Down*</a>	<a href="#">Cool Down*</a>	<a href="#">Cool Down*</a>
Suggested Centers/ Materials/ Resources	<a href="#">Rolling for Fractions (3–5), Stage 2: Multiply a Fraction by a Whole Number (Supporting)</a> <a href="#">Five in a Row: Multiplication (3–5), Stage 4: Three Factors (Supporting)</a>	<a href="#">Rolling for Fractions (3–5), Stage 4: Multiply Fractions (Addressing)</a> <a href="#">Rolling for Fractions (3–5), Stage 2: Multiply a Fraction by a Whole Number (Supporting)</a> <a href="#">Five in a Row: Multiplication (3–5), Stage 4: Three Factors (Supporting)</a>	<a href="#">Rolling for Fractions (3–5), Stage 4: Multiply Fractions (Addressing)</a> <a href="#">Five in a Row: Multiplication (3–5), Stage 4: Three Factors (Supporting)</a>	<a href="#">Rolling for Fractions (3–5), Stage 4: Multiply Fractions (Addressing)</a> <a href="#">Five in a Row: Multiplication (3–5), Stage 4: Three Factors (Supporting)</a>	<a href="#">Rolling for Fractions (3–5), Stage 4: Multiply Fractions (Addressing)</a> <a href="#">How Close? (1–5), Stage 7: Multiply Fractions and Whole Numbers to 5 (Supporting)</a>

## Grade 5 Unit 3 - Multiplying and Dividing Fractions

### Section A - Lessons 1-9

#### Section A Goals:

- Recognize that  $\frac{a}{b} \times \frac{c}{d} = \frac{a \times c}{b \times d}$  and use this generalization to multiply fractions numerically.
- Represent and describe multiplication of a fraction by a fraction using area concepts.

*\*Lessons/resources denoted with an asterisk are Desmos activities*

IM Lesson	L6: Multiply Fractions	L7: Generalize Fraction Multiplication	L8: Apply Fraction Multiplication	L9: My C
Ar Math Content Standards	5.NF.B.4.a	5.NF.B.4.a	5.NF.B.4, 5.NF.B.6	
AR Math Practice Standards		MP8	MP2, MP4	MP4
Accessibility Supports	Action and Expression	Engagement, MLR8	Representation, MLR7	Engage
Vocabulary Focus				
Lesson Resources	<a href="#">L6 - Slide Deck</a> <a href="#">L6 - Student Tasks*</a>	<a href="#">L7 - Slide Deck</a> <a href="#">L7 - Student Tasks*</a>	<a href="#">L8 - Slide Deck</a> <a href="#">L8 - Student Tasks*</a>	<a href="#">L9 - Slid</a> <a href="#">L9 - Stu</a> Ruler, co paper
Assessment	<a href="#">Cool Down*</a>	<a href="#">Cool Down*</a>	<a href="#">Cool Down*</a>	<a href="#">Section</a> <a href="#">Section</a>
Suggested Centers/ Materials/ Resources	<a href="#">Rolling for Fractions (3–5), Stage 4: Multiply Fractions (Addressing)</a> <a href="#">How Close? (1–5), Stage 7: Multiply Fractions and Whole Numbers to 5 (Supporting)</a>	<a href="#">Rolling for Fractions (3–5), Stage 4: Multiply Fractions (Addressing)</a> <a href="#">How Close? (1–5), Stage 7: Multiply Fractions and Whole Numbers to 5 (Supporting)</a>	<a href="#">Rolling for Fractions (3–5), Stage 4: Multiply Fractions (Addressing)</a> <a href="#">Compare (1–5), Stage 4: Divide within 100 (Supporting)</a> <a href="#">How Close? (1–5), Stage 7: Multiply Fractions and Whole Numbers to 5 (Supporting)</a>	<a href="#">Rolling fo</a> <a href="#">Fractions</a> <a href="#">Compare</a> (Support <a href="#">How Clo</a> <a href="#">Fractions</a> (Support

## Grade 5 Unit 3 - Multiplying and Dividing Fractions

### Section B - Lessons 10-16

#### Goals:

- Divide a unit fraction by a whole number using whole-number division concepts.
- Divide a whole number by a unit fraction using whole-number division concepts.

*\*Lessons/resources denoted with an asterisk are Desmos activities*

IM Lesson	L10: Concepts of Division (optional)	L11: Divide Unit Fractions by Whole Numbers	L12: Represent Division of Unit Fractions by Whole Numbers
Ar Math Content Standards	<b>5.NF.B.6</b>	<b>5.NF.B.7</b>	<b>5.NF.B.7</b>
AR Math Practice Standards	<b>MP7</b>	<b>MP2</b>	<b>MP3</b>
Accessibility Supports	Representation	Representation	Engagement
Vocabulary Focus			
Lesson Resources	<a href="#">L10 - Slide Deck</a> <a href="#">L10 - Student Tasks*</a> Tools for creating visual display	<a href="#">L11 - Slide Deck</a> <a href="#">L11 - Student Tasks*</a> Tools for creating visual display	<a href="#">L12 - Slide Deck</a> <a href="#">L12 - Student Tasks*</a>
Assessment	<a href="#">Cool Down*</a>	<a href="#">Cool Down*</a>	<a href="#">Cool Down*</a>
Suggested Centers/ Materials/ Resources	<a href="#">Rolling for Fractions (3–5), Stage 4: Multiply Fractions</a> (Addressing) <a href="#">Compare (1–5), Stage 4: Divide within 100</a> (Supporting) <a href="#">How Close? (1–5), Stage 7: Multiply Fractions and Whole Numbers to 5</a> (Supporting)	<a href="#">Rolling for Fractions (3–5), Stage 4: Multiply Fractions</a> (Addressing) <a href="#">Compare (1–5), Stage 4: Divide within 100</a> (Supporting) <a href="#">How Close? (1–5), Stage 7: Multiply Fractions and Whole Numbers to 5</a> (Supporting)	<a href="#">Rolling for Fractions (3–5), Stage 4: Multiply Fractions</a> (Addressing) <a href="#">Compare (1–5), Stage 4: Divide within 100</a> (Supporting) <a href="#">How Close? (1–5), Stage 7: Multiply Fractions and Whole Numbers to 5</a> (Supporting)

## Grade 5 Unit 3 - Multiplying and Dividing Fractions

### Section B - Lessons 10-16

**Goals:**

- Divide a unit fraction by a whole number using whole-number division concepts.
- Divide a whole number by a unit fraction using whole-number division concepts.

*\*Lessons/resources denoted with an asterisk are Desmos activities*

<b>IM Lesson</b>	<b>L14: Represent Division of Whole Numbers by Unit Fractions</b>	<b>L15: Fraction Division Situations</b>
<b>Ar Math Content Standards</b>	<b>5.NF.B.7</b>	<b>5.NF.B.7</b>
<b>AR Math Practice Standards</b>	<b>MP2, MP8</b>	<b>MP2, MP7</b>
<b>Accessibility Supports</b>	Action and Expression	Engagement, MLR8
<b>Vocabulary Focus</b>		
<b>Lesson Resources</b>	<a href="#">L14 - Slide Deck</a> <a href="#">L14 - Student Tasks*</a>	<a href="#">L15 - Slide Deck</a> <a href="#">L15 - Student Tasks*</a> <a href="#">Fraction Division Problem Sort</a> Poster from previous lesson
<b>Assessment</b>	<a href="#">Cool Down*</a>	<a href="#">Cool Down*</a>
<b>Suggested Centers/ Materials/ Resources</b>	<a href="#">Compare (1–5), Stage 8: Divide Fractions and Whole Numbers</a> (Addressing) <a href="#">Rolling for Fractions (3–5), Stage 5: Divide Unit Fractions and Whole Numbers</a> (Addressing)	<a href="#">Compare (1–5), Stage 8: Divide Fractions and Whole Numbers</a> (Addressing) <a href="#">Rolling for Fractions (3–5), Stage 5: Divide Unit Fractions and Whole Numbers</a> (Addressing) <a href="#">How Close? (1–5), Stage 6: Multiply to 3,000</a> (Supporting)

## Grade 5 Unit 3 - Multiplying and Dividing Fractions

### Section C - Lessons 17-20

**Goals:**

- Solve problems involving fraction multiplication and division.

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IM Lesson	L17: Fraction Multiplication and Division Situations	L18: Represent Situations with Multiplication and Division	L19: Fraction Games
Ar Math Content Standards	5.NF.B.4, 5.NF.B.6, 5.NF.B.7	5.NF.B.4, 5.NF.B.6, 5.NF.B.7	5.NF.B.4, 5.NF.B.6, 5.NF.B.7
AR Math Practice Standards	MP6	MP2, MP3	MP7
Accessibility Supports	Engagement	Engagement, MLR1	Engagement, MLR8
Vocabulary Focus			
Lesson Resources	<a href="#">L17 - Slide Deck</a> <a href="#">L17 - Student Tasks*</a> <a href="#">Info Gap: Tiles</a>	<a href="#">L18 - Slide Deck</a> <a href="#">L18 - Student Tasks*</a>	<a href="#">L19 - Slide Deck</a> <a href="#">L19 - Student Tasks*</a>
Assessment	<a href="#">Cool Down*</a>	<a href="#">Cool Down*</a>	<a href="#">Cool Down*</a> <a href="#">Section C Practice Problems*</a> <a href="#">Section C Checkpoint*</a>
Suggested Centers/ Materials/ Resources	<a href="#">Compare (1–5), Stage 8: Divide Fractions and Whole Numbers</a> (Addressing) <a href="#">Rolling for Fractions (3–5), Stage 5: Divide Unit Fractions and Whole Numbers</a> (Addressing) <a href="#">How Close? (1–5), Stage 6: Multiply to 3,000</a> (Supporting)	<a href="#">Compare (1–5), Stage 8: Divide Fractions and Whole Numbers</a> (Addressing) <a href="#">Rolling for Fractions (3–5), Stage 5: Divide Unit Fractions and Whole Numbers</a> (Addressing) <a href="#">How Close? (1–5), Stage 6: Multiply to 3,000</a> (Supporting)	<a href="#">Compare (1–5), Stage 8: Divide Fractions and Whole Numbers</a> (Addressing) <a href="#">Rolling for Fractions (3–5), Stage 5: Divide Unit Fractions and Whole Numbers</a> (Addressing) <a href="#">How Close? (1–5), Stage 6: Multiply to 3,000</a> (Supporting)

\*Created by Jill Jones, and updated by Heather Morsman, Heather Reynolds, and Britnee Wright\*