

Grade 7

Units 2 & 3

Week 3

Parents: Please help your child choose the most appropriate assignment(s) to complete each day. When the day's assignment is done, students finish the two reflection statements on this page.

Please note Extra Practice activities are on-level for the grade level. Re-Engage activities give students additional support.

Special Education students should use the Re-Engage lessons as shown in the weekly plans.

	Monday	Tuesday	Wednesday	Thursday	Friday
Topic	Divide Rational Numbers	Properties of Multiplication and Division	Convert Rational Numbers to Decimals	Understanding Ratios	Unit Rates
Assignment	Unit 2 Lesson 10 Re-Engage Extra Practice	Unit 2 Lesson 13 Re-Engage Extra Practice	Unit 2 Lesson 14 Re-Engage Extra Practice	Unit 3 Lesson 1 Re-Engage A Re-Engage B Extra Practice	Unit 3 Lesson 2 Extra Practice Unit 3 Lesson 3 Re-Engage Extra Practice
Video link	Unit 2 Lesson 10	Unit 2 Lesson 13	Unit 2 Lesson 14	Unit 3 Lesson 1	Unit 3 Lesson 2 Unit 3 Lesson 3
Fluency Practice	Integers Addition Fluency A	Integers Addition Fluency B	Integers Addition Fluency C	Integers Addition Fluency D	Integers Addition Fluency A
Reflection	One thing I was successful with is... One thing I need more help with is...	One thing I was successful with is... One thing I need more help with is...	One thing I was successful with is... One thing I need more help with is...	One thing I was successful with is... One thing I need more help with is...	One thing I was successful with is... One thing I need more help with is...

Find this packet on swunmath.com. Click on the hyperlinks to jump to the lesson videos.

Re-Engage

Unit 2 Lesson 10: Divide Positive Rational Numbers: Mixed Numbers



Name: _____

Date: _____

Model

$$1\frac{3}{5} \div 1\frac{3}{8}$$

Directions: Divide

Step 1. Rewrite the mixed numbers as improper fractions.

$$1\frac{3}{5} = \frac{8}{5} \text{ and } 1\frac{3}{8} = \frac{11}{8}$$

Step 2. Divide $\frac{8}{5} \div \frac{11}{8}$

Notice that division is the same as multiplication of the reciprocal.

$$\frac{8}{5} \times \frac{8}{11} = \frac{8 \times 8}{5 \times 11}$$

Step 3. Multiply.

Therefore the solution is $\frac{64}{55}$ or $1\frac{9}{55}$

Structured Guided Practice

Directions: Divide.

1. $3\frac{1}{4} \div 4\frac{2}{5}$

2. $2\frac{4}{7} \div 1\frac{1}{5}$

Re-Engage

Unit 2 Lesson 10: Divide Positive Rational Numbers: Mixed Numbers



Student Practice

Directions: Divide.

1. $1\frac{3}{5} \div 1\frac{3}{8}$

2. $2\frac{1}{3} \div 1\frac{3}{5}$

3. $1\frac{4}{5} \div 2\frac{2}{3}$

4. $3\frac{4}{7} \div 2\frac{2}{5}$

5. $1\frac{3}{8} \div 3\frac{2}{5}$

6. $2\frac{1}{4} \div 1\frac{4}{7}$

Extra Practice

Unit 2 • Lesson 10: Divide Rational Numbers



Name: _____

Date: _____

Directions: Divide. Round decimal answers to the nearest thousandth.

1. $12.25 \div (-3.5) =$

2. $3\frac{1}{4} \div (-4\frac{2}{3}) =$

3. $-8.2 \div 4.8 =$

4. $7\frac{3}{5} \div -2 =$

5. $12.4 \div (-2.1) =$

6. $-12\frac{2}{5} \div 7\frac{3}{4} =$

Re-Engage

Unit 2 Lesson 13: Multiplication and Division Properties with Positive Rational Numbers



Name: _____

Date: _____

Model

Model 1

$$(6) \times (10) \div (6.4)$$

Directions: Solve

Step 1. Multiply $6 \times 10 = 60$

Step 2. Divide $60 \div 6.4$

Solution is **9.375**

Model 2

$$(24) \div (8) \times \left(\frac{2}{5}\right)$$

Directions: Solve

Step 1. Divide $24 \div 8 = 3$

Step 2. Multiply $3 \times \frac{2}{5}$

Solution is $\frac{6}{5}$ or $1\frac{1}{5}$

Structured Guided Practice

Directions: Solve. Round to the nearest hundredth.

1. $(2) \times (13) \div (8.4)$

2. $(8) \times (18) \div (6.4)$

3. $(35) \div (7) \times \left(\frac{3}{4}\right)$

4. $(44) \div (11) \times \left(\frac{4}{9}\right)$

Re-Engage

Unit 2 Lesson 13: Multiplication and Division Properties with Positive Rational Numbers



Student Practice

Directions: Solve. Round to the nearest hundredth.

1. $(6) \times (12) \div (6.4)$

2. $(7) \times (15) \div (8.0)$

3. $(5) \times (20) \div (6.4)$

4. $(42) \div (7) \times \left(\frac{2}{7}\right)$

5. $(64) \div (16) \times \left(\frac{4}{5}\right)$

6. $(63) \div (9) \times \left(\frac{2}{9}\right)$

Extra Practice

Unit 2 · Lessons 13: Properties of Multiplication and Division



Name: _____

Date: _____

Directions: Solve

1. $-9 \times \frac{2}{5} \div \frac{2}{5}$

2. $6 \times \frac{2}{3} \times \left(-\frac{1}{4}\right) \times -9 \times 4$

3. $8 \times (-6) \div \left(-\frac{3}{8}\right)$

4. $-\frac{1}{5} \times \frac{1}{3} \times (-10) \times 2 \times (-6)$

5. $8 \times (-6) \div \left(-\frac{8}{2}\right)$

6. $-\frac{1}{4} \times (-8) \times (-3) \times 12 \times \frac{1}{6}$

Re-Engage

Unit 2 Lesson 14: Long Division of Whole Numbers



Name: _____

Date: _____

Model

$$4 \overline{)19}$$

Directions: Divide

Step 1. Multiply $4 \times 4 = 16$ and subtract from 19.

$$\begin{array}{r} 4 \\ 4 \overline{)19} \\ - 16 \\ \hline 3 \end{array}$$

Step 2. Add decimals and zeros and drop the zero to turn 3 into 30. Multiply $4 \times 7 = 28$ and subtract.

$$\begin{array}{r} 4.7 \\ 4 \overline{)19.0} \\ - 16 \downarrow \\ \hline 30 \\ - 28 \\ \hline 2 \end{array}$$

Step 3. Repeat step 1 and 2 until no remainder is left.

$$\begin{array}{r} 4.75 \\ 4 \overline{)19.00} \\ - 16 \downarrow \downarrow \\ \hline 30 \\ - 28 \downarrow \\ \hline 20 \\ - 20 \\ \hline 0 \end{array}$$

Structured Guided Practice

Directions: Divide.

1. $5 \overline{)24}$

2. $4 \overline{)37}$

Re-Engage

Unit 2 Lesson 14: Long Division of Whole Numbers



Student Practice

Directions: Divide.

1. $8 \overline{)46}$

2. $8 \overline{)93}$

3. $4 \overline{)61}$

4. $8 \overline{)89}$

5. $8 \overline{)61}$

6. $4 \overline{)17}$

Extra Practice

Unit 2 • Lesson 14: Convert Rational Numbers to Decimals



Name: _____

Date: _____

Directions: Convert the fraction to a decimal and label as repeating or terminating.

1. $\frac{12}{5}$

2. $\frac{13}{3}$

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

4. $\frac{4}{12}$

5. $\frac{2}{8}$

6. $13\frac{1}{5}$

Re-Engage

Unit 3 Lesson 1-2a: Convert Ratios to Fractions



Name: _____

Date: _____

Model

Model 1

6 to 7

Directions: Write the ratio as a fraction

Step 1. The first number, 6 is the numerator of the new fraction

Step 2. The second number, 7 is the denominator of the new fraction

Solution: $\frac{6}{7}$

Model 2

8 : 9

Directions: Write the ratio as a fraction

Step 1. The first number, 8 is the numerator of the new fraction

Step 2. The second number, 9 is the denominator of the new fraction

Solution: $\frac{8}{9}$

Structured Guided Practice

Directions: Convert the ratio into a fraction.

1. 12 to 35

2. 16 to 7

3. 4 : 3

4. 18 : 19

Re-Engage

Unit 3 Lesson 1-2a: Convert Ratios to Fractions



Student Practice

Directions: Convert the ratio into a fraction.

1. 16 to 17	2. 23 to 72
3. 15 to 27	4. 18 : 91
5. 56 : 84	6. 5 : 125

Re-Engage

Unit 3 Lesson 1-2b: Convert Ratios to Unit Rates



Name: _____

Date: _____

Model

Model 1

$$121 \text{ to } \frac{1}{4}$$

Directions: Convert the ratio to a unit rate.

Step 1. Write the ratio as a fraction

$$\frac{121}{\frac{1}{4}}$$

Step 2. Divide both the numerator and the denominator by the denominator

$$\frac{121 \div \frac{1}{4}}{\frac{1}{4} \div \frac{1}{4}} = \frac{121 \times 4}{\frac{1}{4} \times 4}$$

Solution:

$$\frac{484}{1} = 484$$

Model 2

$$\frac{1}{3} : \frac{1}{2}$$

Directions: Convert the ratio to a unit rate.

Step 1. Write the ratio as a fraction

$$\frac{\frac{1}{3}}{\frac{1}{2}}$$

Step 2. Divide both the numerator and the denominator by the denominator

$$\frac{\frac{1}{3} \div \frac{1}{2}}{\frac{1}{2} \div \frac{1}{2}} = \frac{\frac{1}{3} \times 2}{\frac{1}{2} \times 2}$$

Solution:

$$\frac{\frac{2}{3}}{1} = \frac{2}{3}$$

Structured Guided Practice

Directions: Convert to a unit rate.

1. $42 \text{ to } \frac{1}{4}$

2. $15 \text{ to } \frac{1}{6}$

3. $\frac{1}{4} : \frac{1}{5}$

4. $\frac{1}{6} : \frac{1}{7}$

Re-Engage

Unit 3 Lesson 1-2b: Convert Ratios to Unit Rates



Student Practice

Directions: Convert to a unit rate.

1. 28 to $\frac{1}{5}$

2. 92 to $\frac{1}{6}$

3. 56 to $\frac{1}{7}$

4. $\frac{1}{6} : \frac{1}{8}$

5. $\frac{1}{2} : \frac{1}{10}$

6. $\frac{1}{3} : \frac{1}{7}$

Extra Practice

Unit 3 • Lessons 1: Understanding Ratios

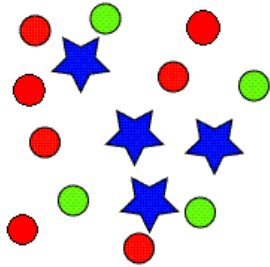


Name: _____

Date: _____

Directions: Read and write answer in word, fraction and ratio forms.

1. What is the ratio of red circles to stars?



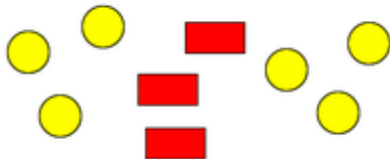
2. 9 cupcakes are strawberry. 12 cupcakes are not strawberry. What is the ratio of the number of strawberry cupcakes to total cupcakes?

3. What is the ratio of oranges to total items?



4. There are 15 boys and 24 girls in the student council at the school. What is the ratio of the number of boys to the total number of students in student council?

5. What is the ratio of rectangles to total shapes?



6. Of the 72 animals in the shelter, 44 are dogs and the rest are cats. What is the ratio of the number of cats to dogs?

Extra Practice

Unit 3 • Lessons 2: Unit Rates



Name: _____

Date: _____

Directions: Find the unit rate.

1. Sam can solve 17 problems in half an hour.

2. Sally can bake 2 dozen cupcakes in an hour and a half.

3. Mike can mend 8 pants in an hour and 20 minutes. (Use $\frac{1}{3}$ of an hour for time.)

4. Lance can peel 18 potatoes in an hour and a half.

5. Terry can squeeze 8 oranges in 15 minutes. (Use $\frac{1}{4}$ of an hour for time.)

6. Diana can read $\frac{1}{4}$ of a book in $\frac{1}{2}$ hours.

Re-Engage

Unit 3 Lesson 3: Find Unit Rates (Cross-Multiplication)



Name: _____

Date: _____

Model

Cross-Multiplication Method

$$\frac{1}{2} = \frac{5}{10}$$

$$2 \cdot 5 = 10 \cdot 1$$
$$10 = 10$$

$$\frac{x}{9} = \frac{2}{3}$$

$$9 \cdot 2 = 3 \cdot x$$
$$18 = 3x$$
$$6 = x$$

Find the Unit Rate

For every 2 miles ran, the jogger took 3 water breaks. What is the unit rate of miles per break?

$$\frac{2}{3} = \frac{x}{1}$$

$$2 \cdot 1 = 3 \cdot x$$
$$2 = 3x$$

$$\frac{2}{3} = x$$

The jogger takes a water break every $\frac{2}{3}$ a mile.

Structured Guided Practice

Directions: Solve for the unknown.

1.

$$\frac{4}{5} = \frac{x}{20}$$

2.

$$\frac{3}{4} = \frac{x}{1}$$

Re-Engage

Unit 3 Lesson 3: Find Unit Rates (Cross-Multiplication)



Student Practice

Directions:

1.

$$\frac{3}{6} = \frac{2}{x}$$

2.

$$\frac{7}{8} = \frac{x}{1}$$

3.

$$\frac{x}{5} = \frac{12}{3}$$

4.

$$\frac{5}{12} = \frac{x}{1}$$

5.

$$\frac{4}{24} = \frac{x}{3}$$

6.

$$\frac{4}{16} = \frac{x}{1}$$

Extra Practice

Unit 3 • Lesson 3: Unit Rates



Name: _____

Date: _____

Directions: Read and solve.

- | | |
|---|---|
| 1. Private Barns peels $3\frac{1}{2}$ potatoes every $\frac{1}{5}$ of a minute. What is the unit rate of potatoes per minute? How many potatoes can Private Barns peel in 45 minutes? | 2. A North American Hummingbird beats its wings 53 times per second. What is the unit rate per minute? How many times will it beat its wings in an hour? |
| 3. A guinea pig eats $\frac{1}{8}$ cup of pellets per 8 hours. What is the unit rate of cups per day? How many cups of pellets would it need for 2 weeks? | 4. A man is mixing water, cement, and sand for the patio his is building. He uses $1\frac{1}{2}$ gallons of water for 3 gallons of cement for $4\frac{1}{2}$ gallons of sand. What is the unit rate of water to cement to sand? How much sand will he need to mix into 12 gallons of water? |
| 5. Samantha travels $17\frac{1}{3}$ miles every $\frac{1}{4}$ of an hour. What is the unit rate of miles per hour? How many miles will Samantha travel in 13 hours? | 6. Jeffrey sells 15 half gallons of milk every $\frac{1}{2}$ of a work shift (Use 8 hours as a work shift). What is the unit rate of full gallons sold per hour? How many gallons will Jeffrey sell in a 40-hour work week? |

**Integers: Addition
Fluency A**
(70 items)

Name _____ Date _____

$-6 + 8 =$	$-7 + 5 =$	$-6 + -6 =$	$4 + -7 =$	$-3 + 2 =$	$6 + -7 =$	$8 + -4 =$
$-5 + -5 =$	$-5 + -4 =$	$-9 + 8 =$	$-6 + -4 =$	$-4 + -3 =$	$3 + -4 =$	$-2 + -3 =$
$-6 + -2 =$	$-7 + 5 =$	$-8 + -3 =$	$-5 + 7 =$	$-2 + -9 =$	$-2 + -5 =$	$0 + 6 =$
$5 + -9 =$	$7 + -9 =$	$-6 + 1 =$	$-4 + -8 =$	$-2 + 4 =$	$-8 + -9 =$	$4 + -4 =$
$-7 + -1 =$	$-7 + -7 =$	$-2 + 6 =$	$-7 + -8 =$	$-3 + -7 =$	$-9 + 6 =$	$-9 + 4 =$
$-2 + -2 =$	$7 + -6 =$	$-8 + 5 =$	$8 + -7 =$	$-5 + 6 =$	$-6 + -5 =$	$-5 + 4 =$
$-3 + -6 =$	$8 + -2 =$	$7 + -4 =$	$9 + -3 =$	$-9 + 2 =$	$5 + -3 =$	$8 + -1 =$
$-4 + 9 =$	$-7 + 3 =$	$-4 + -5 =$	$-9 + -5 =$	$-3 + 3 =$	$-2 + -8 =$	$-4 + 2 =$
$-9 + -4 =$	$-7 + -2 =$	$-9 + 1 =$	$4 + -9 =$	$3 + -8 =$	$-3 + -5 =$	$-9 + 9 =$
$6 + -3 =$	$-2 + 7 =$	$-9 + -7 =$	$-4 + -6 =$	$-5 + 8 =$	$-8 + 6 =$	$-8 + 9 =$

**Integers: Addition
Fluency B**
(70 items)

Name _____ Date _____

$-3 + -6 =$	$8 + -2 =$	$7 + -4 =$	$9 + -3 =$	$-9 + 2 =$	$5 + -3 =$	$8 + -1 =$
$-4 + 9 =$	$-7 + 3 =$	$-4 + -5 =$	$-9 + -5 =$	$-3 + 3 =$	$-2 + -8 =$	$-4 + 2 =$
$-7 + -1 =$	$-7 + -7 =$	$-2 + 6 =$	$-7 + -8 =$	$-3 + -7 =$	$-9 + 6 =$	$-9 + 4 =$
$-2 + -2 =$	$7 + -6 =$	$-8 + 5 =$	$8 + -7 =$	$-5 + 6 =$	$-6 + -5 =$	$-5 + 4 =$
$-9 + -4 =$	$-7 + -2 =$	$-9 + 1 =$	$4 + -9 =$	$3 + -8 =$	$-3 + -5 =$	$-9 + 9 =$
$6 + -3 =$	$-2 + 7 =$	$-9 + -7 =$	$-4 + -6 =$	$-5 + 8 =$	$-8 + 6 =$	$-8 + 9 =$
$-5 + -5 =$	$-8 + -4 =$	$-9 + 8 =$	$-6 + -4 =$	$-4 + -3 =$	$3 + -4 =$	$-2 + -3 =$
$-6 + -2 =$	$-7 + 5 =$	$-8 + -3 =$	$-5 + 7 =$	$-5 + 7 =$	$-2 + -5 =$	$0 + 6 =$
$5 + -9 =$	$7 + -9 =$	$6 + -1 =$	$-4 + -8 =$	$-2 + 4 =$	$-8 + -9 =$	$4 + -4 =$
$-6 + 8 =$	$-7 + 5 =$	$-6 + -6 =$	$4 + -7 =$	$-3 + 2 =$	$6 + -7 =$	$8 + -4 =$

**Integers: Addition
Fluency C**
(70 items)

Name _____ Date _____

$-3 + 9 =$	$8 + -1 =$	$7 + -4 =$	$-6 + -3 =$	$-9 + 2 =$	$5 + -3 =$	$8 + -2 =$
$-4 + 9 =$	$-7 + 3 =$	$-4 + -5 =$	$-9 + -5 =$	$-3 + 3 =$	$-2 + -8 =$	$-4 + 2 =$
$-9 + -4 =$	$-7 + -2 =$	$-9 + 1 =$	$4 + -9 =$	$3 + -8 =$	$-3 + -5 =$	$-9 + 9 =$
$6 + -3 =$	$-2 + 7 =$	$-9 + -7 =$	$-4 + -6 =$	$-5 + 8 =$	$-8 + 6 =$	$-8 + 9 =$
$-6 + 8 =$	$-7 + 5 =$	$-6 + -6 =$	$4 + -7 =$	$-3 + 2 =$	$6 + -7 =$	$8 + -4 =$
$-6 + -2 =$	$-9 + 5 =$	$-8 + -3 =$	$-5 + 7 =$	$-5 + 7 =$	$-2 + -5 =$	$0 + 6 =$
$5 + -9 =$	$7 + -9 =$	$6 + -1 =$	$-4 + -8 =$	$-2 + 4 =$	$-8 + -9 =$	$4 + -4 =$
$-2 + -3 =$	$-8 + -4 =$	$-9 + 8 =$	$-6 + -4 =$	$-4 + -3 =$	$3 + -4 =$	$-5 + -5 =$
$-7 + -1 =$	$-7 + -7 =$	$-2 + 6 =$	$-7 + -8 =$	$-3 + -7 =$	$-9 + 6 =$	$-9 + 4 =$
$-2 + -2 =$	$7 + -6 =$	$-8 + 5 =$	$8 + -7 =$	$-5 + 6 =$	$-6 + -5 =$	$-5 + 4 =$

**Integers: Addition
Fluency D**
(70 items)

Name _____ Date _____

$-2 + -9 =$	$-7 + 5 =$	$-8 + -3 =$	$-5 + 7 =$	$-6 + -2 =$	$-2 + -5 =$	$0 - 6 =$
$4 + -4 =$	$7 + -9 =$	$6 + -1 =$	$-4 + -8 =$	$-2 + 4 =$	$-8 + -9 =$	$5 + -9 =$
$-3 + -5 =$	$-7 + -2 =$	$-9 + 1 =$	$4 + -9 =$	$3 + -8 =$	$-9 + -4 =$	$-9 + 9 =$
$6 + -3 =$	$-2 + 7 =$	$-9 + -7 =$	$-4 + -6 =$	$-5 + 8 =$	$-8 + 6 =$	$-8 + 9 =$
$-6 + 8 =$	$-7 + 5 =$	$-6 + -6 =$	$4 + -7 =$	$-3 + 2 =$	$6 + -7 =$	$8 + -4 =$
$-6 + -5 =$	$7 + -6 =$	$-8 + 5 =$	$8 + -7 =$	$-5 + 6 =$	$-2 + -2 =$	$-5 + 4 =$
$4 - 9 =$	$-7 + 3 =$	$-4 + -5 =$	$-9 + -5 =$	$-3 + 3 =$	$-2 + -8 =$	$-4 + 2 =$
$-3 + -7 =$	$-7 + -7 =$	$-2 + 6 =$	$-7 + -8 =$	$-7 + -1 =$	$-9 + 6 =$	$-9 + 4 =$
$-3 + -6 =$	$8 + -2 =$	$7 + -4 =$	$9 + -3 =$	$-9 + 2 =$	$5 + -3 =$	$8 + -1 =$
$-8 + -8 =$	$-8 + -4 =$	$-9 + 8 =$	$-6 + -4 =$	$-4 + -3 =$	$3 + -4 =$	$-2 + -3 =$

**Integers: Addition
Fluency A**
(70 items)

Name _____ Date _____

$-6 + 8 =$	$-7 + 5 =$	$-6 + -6 =$	$4 + -7 =$	$-3 + 2 =$	$6 + -7 =$	$8 + -4 =$
$-5 + -5 =$	$-5 + -4 =$	$-9 + 8 =$	$-6 + -4 =$	$-4 + -3 =$	$3 + -4 =$	$-2 + -3 =$
$-6 + -2 =$	$-7 + 5 =$	$-8 + -3 =$	$-5 + 7 =$	$-2 + -9 =$	$-2 + -5 =$	$0 + 6 =$
$5 + -9 =$	$7 + -9 =$	$-6 + 1 =$	$-4 + -8 =$	$-2 + 4 =$	$-8 + -9 =$	$4 + -4 =$
$-7 + -1 =$	$-7 + -7 =$	$-2 + 6 =$	$-7 + -8 =$	$-3 + -7 =$	$-9 + 6 =$	$-9 + 4 =$
$-2 + -2 =$	$7 + -6 =$	$-8 + 5 =$	$8 + -7 =$	$-5 + 6 =$	$-6 + -5 =$	$-5 + 4 =$
$-3 + -6 =$	$8 + -2 =$	$7 + -4 =$	$9 + -3 =$	$-9 + 2 =$	$5 + -3 =$	$8 + -1 =$
$-4 + 9 =$	$-7 + 3 =$	$-4 + -5 =$	$-9 + -5 =$	$-3 + 3 =$	$-2 + -8 =$	$-4 + 2 =$
$-9 + -4 =$	$-7 + -2 =$	$-9 + 1 =$	$4 + -9 =$	$3 + -8 =$	$-3 + -5 =$	$-9 + 9 =$
$6 + -3 =$	$-2 + 7 =$	$-9 + -7 =$	$-4 + -6 =$	$-5 + 8 =$	$-8 + 6 =$	$-8 + 9 =$