

Are you ready to
➔ EARN?

Mission 5:

Equivalent Fractions

Name: _____

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Fourth Edition

Name: _____

Weekly Goal Tracker

Week of:	My goal is to earn badges for lessons: _____	Teacher Signature:
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Name: _____

Mission 5: Workbook Checklist

1. Decompose. Compose. Repeat.	Date: _____	Teacher Signature: _____
Learning Lab:	<input type="radio"/> Notes	<input type="radio"/> Exit Ticket
2. Decompose and Group	Date: _____	Teacher Signature: _____
Math Chat:	<input type="radio"/> Notes	<input type="radio"/> Exit Ticket
3. Decompose and Multiply	Date: _____	Teacher Signature: _____
Math Chat:	<input type="radio"/> Notes	<input type="radio"/> Exit Ticket
4. Different Decompositions	Date: _____	Teacher Signature: _____
Math Chat:	<input type="radio"/> Notes	<input type="radio"/> Exit Ticket
5. Same Share	Date: _____	Teacher Signature: _____
Learning Lab:	<input type="radio"/> Notes	<input type="radio"/> Exit Ticket
6. Area Model – Breakdown!	Date: _____	Teacher Signature: _____
Math Chat:	<input type="radio"/> Notes	<input type="radio"/> Exit Ticket
7. Same Area	Date: _____	Teacher Signature: _____
Math Chat:	<input type="radio"/> Notes	<input type="radio"/> Exit Ticket
8. Multiply for Equality?	Date: _____	Teacher Signature: _____
Math Chat:	<input type="radio"/> Notes	<input type="radio"/> Exit Ticket
9. Same Fraction, Fewer Parts	Date: _____	Teacher Signature: _____
Math Chat:	<input type="radio"/> Notes	<input type="radio"/> Exit Ticket

10. Same Fraction, Fewest Parts Date:_____ Teacher Signature:_____

Math Chat:

Notes

Exit Ticket

11. Fraction Line Up! Date:_____ Teacher Signature:_____

Learning Lab:

Exit Ticket

12. Benchmark Bonanza Date:_____ Teacher Signature:_____

Learning Lab:

Exit Ticket

13. Benchmark to Compare Date:_____ Teacher Signature:_____

Math Chat:

Notes

Exit Ticket

14. Make the Same to Compare Date:_____ Teacher Signature:_____

Math Chat:

Notes

Exit Ticket

15. United Units Date:_____ Teacher Signature:_____

Learning Lab:

Exit Ticket

16. Like Units Make It Work Date:_____ Teacher Signature:_____

Math Chat:

Notes

Exit Ticket

17. Whole Use Date:_____ Teacher Signature:_____

Math Chat:

Notes

Exit Ticket

18. Three's Company Date:_____ Teacher Signature:_____

Z-Squad:

Notes

Exit Ticket

19. Word Play Date:_____ Teacher Signature:_____

Learning Lab:

Exit Ticket

20. Like Units, Like Sum Date:_____ Teacher Signature:_____

Math Chat:

Notes

Exit Ticket

Name: _____

21. Sum It Up	Date: _____	Teacher Signature: _____
Math Chat:	<input type="radio"/> Notes	<input type="radio"/> Exit Ticket
22. Fraction To/Fraction From	Date: _____	Teacher Signature: _____
Math Chat:	<input type="radio"/> Notes	<input type="radio"/> Exit Ticket
23. Fraction Build-up	Date: _____	Teacher Signature: _____
Math Chat:	<input type="radio"/> Notes	<input type="radio"/> Exit Ticket
24. Beyond the Whole	Date: _____	Teacher Signature: _____
Learning Lab:		<input type="radio"/> Exit Ticket
25. Form Follows Function	Date: _____	Teacher Signature: _____
Math Chat:	<input type="radio"/> Notes	<input type="radio"/> Exit Ticket
26. Benchmark Boogie	Date: _____	Teacher Signature: _____
Math Chat:	<input type="radio"/> Notes	<input type="radio"/> Exit Ticket
27. We Like Units	Date: _____	Teacher Signature: _____
Math Chat:	<input type="radio"/> Notes	<input type="radio"/> Exit Ticket
28. Spotting and Plotting	Date: _____	Teacher Signature: _____
Z-Squad:	<input type="radio"/> Notes	<input type="radio"/> Exit Ticket
29. Estimation Station	Date: _____	Teacher Signature: _____
Learning Lab:		<input type="radio"/> Exit Ticket
30. Sum Mixed, Sum Not	Date: _____	Teacher Signature: _____
Math Chat:	<input type="radio"/> Notes	<input type="radio"/> Exit Ticket
31. Mixed Sums	Date: _____	Teacher Signature: _____
Math Chat:	<input type="radio"/> Notes	<input type="radio"/> Exit Ticket

32. Count Back to Subtract

Date: _____ Teacher Signature: _____

Math Chat:

 Notes Exit Ticket

33. Break Down to Subtract

Date: _____ Teacher Signature: _____

Math Chat:

 Notes Exit Ticket

35. Associate How You Like

Date: _____ Teacher Signature: _____

Math Chat:

 Notes Exit Ticket

36. Fast Times

Date: _____ Teacher Signature: _____

Z-Squad:

 Notes Exit Ticket

37. Multiply Mix

Date: _____ Teacher Signature: _____

Math Chat:

 Notes Exit Ticket

39. Prepare to Compare

Date: _____ Teacher Signature: _____

Z-Squad:

 Notes Exit Ticket

40. Plotting Along

Date: _____ Teacher Signature: _____

Z-Squad:

 Notes Exit Ticket

Lesson 1
G:4 M:5

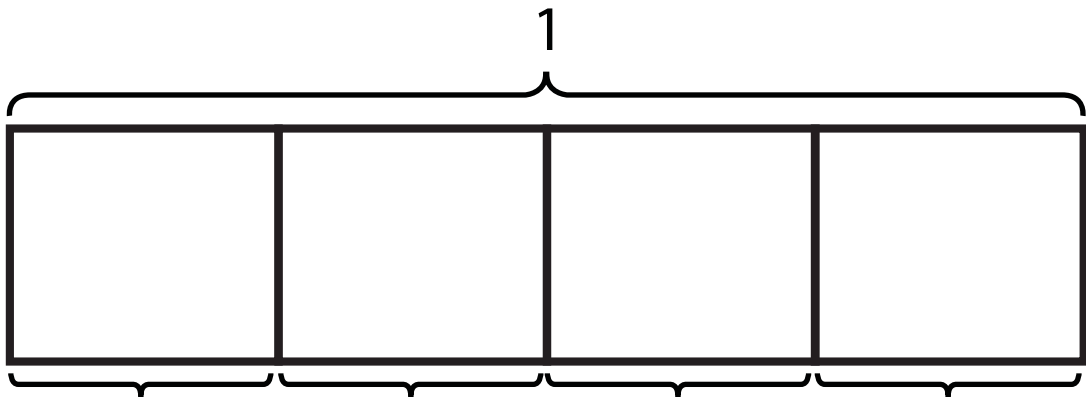
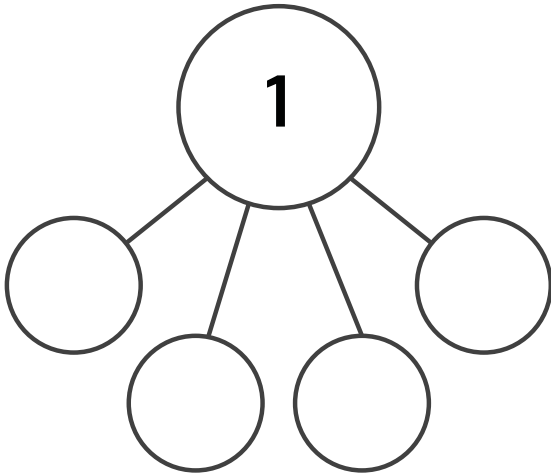
EXIT TICKET


Name: _____ Date: _____

Complete:

Class: _____

1. Complete the number bond and write the number sentence to match the tape diagram.





2. Draw and label tape diagrams to model each number sentence.

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

b. $\frac{5}{6} = \frac{2}{6} + \frac{2}{6} + \frac{1}{6}$



Lesson 2
G:4 M:5

Decompose and Group

ZEARN STUDENT NOTES

Name: _____ Date: _____

Complete:

Class: _____

1

How can you decompose $\frac{7}{8}$ into two parts?

SHOW YOUR WORK

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

$$\frac{7}{8} = \underline{\quad} + \underline{\quad}$$



EXTRA WORKSPACE



Lesson 2
G:4 M:5

EXIT TICKET

Name: _____ Date: _____

Complete:

Class: _____

Step 1: Draw and shade a tape diagram of the given fraction.

Step 2: Record the decomposition of the fraction in three different ways using number sentences.

$$\frac{4}{7}$$

TAPE DIAGRAM

DECOMPOSITIONS



Lesson 3
G:4 M:5

Decompose and Multiply

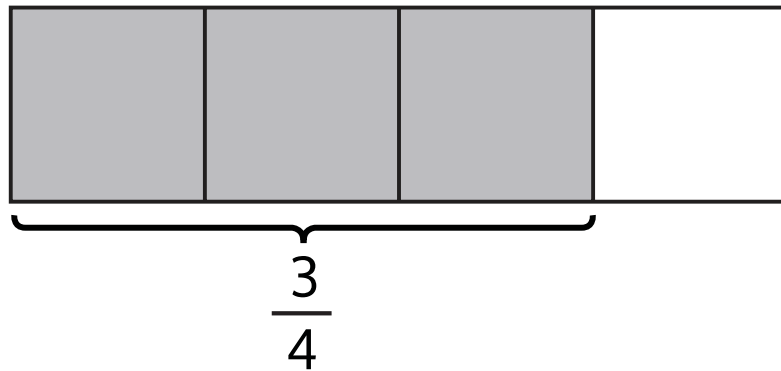
ZEARN STUDENT NOTES

Name: _____ Date: _____

Complete:

Class: _____

- 1 Decompose $\frac{3}{4}$ as the sum of unit fractions.
Then, express that addition sentence using multiplication.



$$\frac{3}{4} = \frac{\quad}{\quad} + \frac{\quad}{\quad} + \frac{\quad}{\quad}$$

$$\frac{3}{4} = \frac{\quad}{\quad} \times \frac{\quad}{\quad}$$



EXTRA WORKSPACE



Lesson 3
G:4 M:5

EXIT TICKET

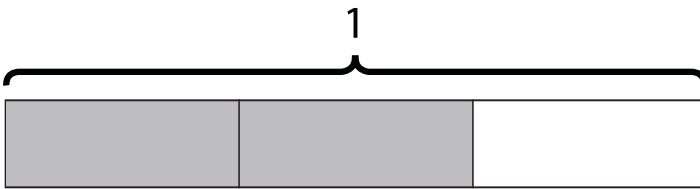
Name: _____ Date: _____

Complete:

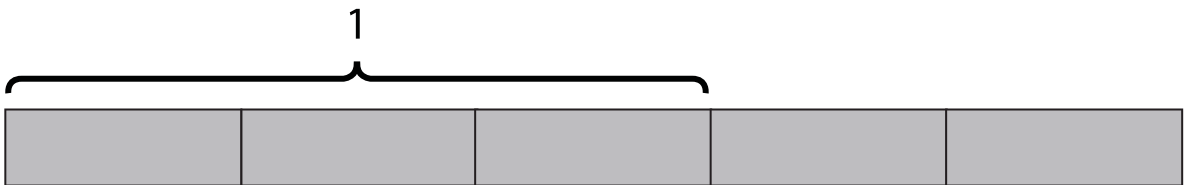
Class: _____

1. Decompose each fraction modeled by a tape diagram as a sum of unit fractions. Write the equivalent multiplication sentence.

a.



b.



- 
2. Draw a tape diagram and record the given fraction's decomposition into unit fractions as a multiplication sentence.

SHOW YOUR WORK

$$\frac{6}{9}$$



Lesson 4
G:4 M:5

Different Decompositions

ZEARN STUDENT NOTES

Name: _____ Date: _____

Complete:

Class: _____

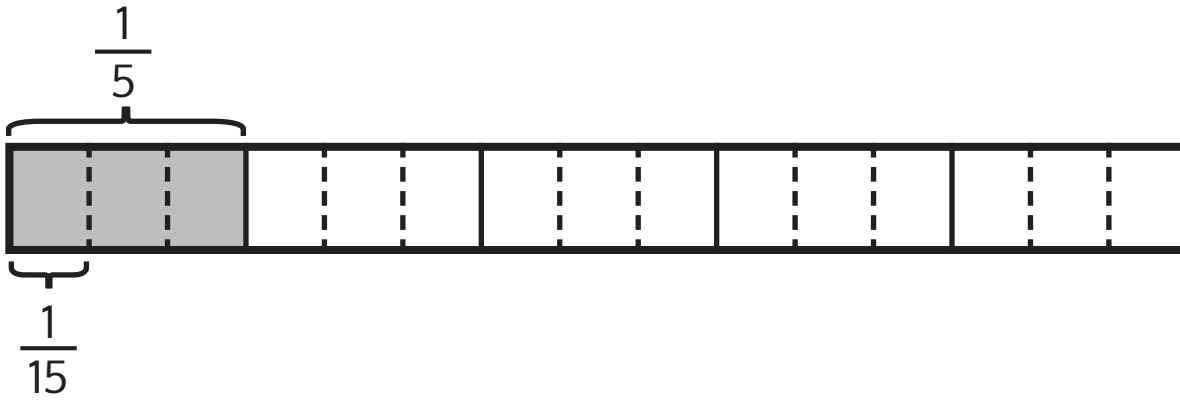
- 1 Use the tape diagram to show the decomposition of $\frac{1}{3}$ as the sum of smaller unit fractions.

SHOW YOUR WORK



2

Write an addition sentence and a multiplication sentence to show how many fifteenths it takes to make 1 fifth.



SOLVE

$$\frac{1}{5} = \underline{\quad} + \underline{\quad} + \underline{\quad} = \underline{\quad}$$

$$\frac{1}{5} = \underline{\quad} \times \underline{\quad} = \underline{\quad}$$



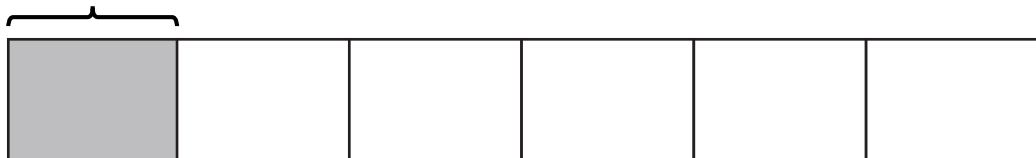
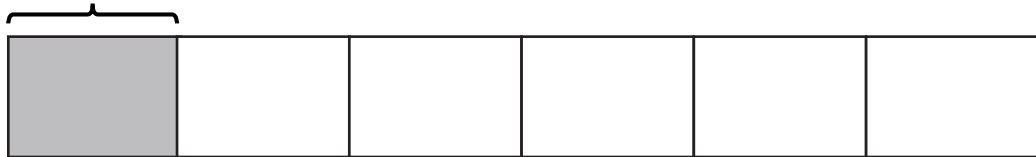
Lesson 4
G:4 M:5

EXIT TICKET

Name: _____ Date: _____

Complete: Class: _____

1. The total length of the tape diagram represents 1 whole. Decompose the shaded unit fraction as the sum of smaller unit fractions in at least two different ways.





2. Draw a tape diagram to prove the following statement.

SHOW YOUR WORK

$$\frac{2}{3} = \frac{4}{6}$$



Lesson 5
G:4 M:5

EXIT TICKET

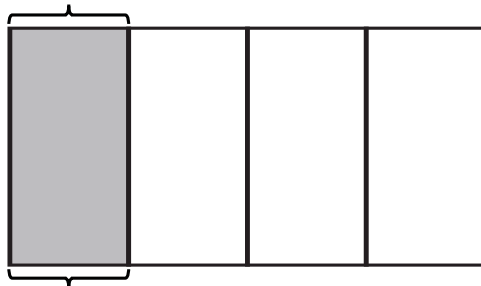
Name: _____ Date: _____

Complete:

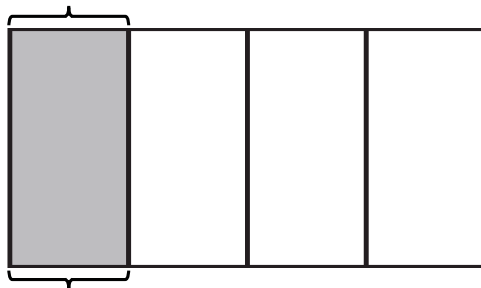
Class: _____


1. Draw horizontal lines to decompose each rectangle into the number of rows as indicated. Use the model to give the shaded area as both a sum of unit fractions and as a multiplication sentence.

a. 2 rows



b. 3 rows



- 
2. Draw an area model to show the decomposition represented by the number sentence below. Represent the decomposition as a sum of unit fractions and as a multiplication sentence.

SHOW YOUR WORK

$$\frac{3}{5} = \frac{6}{10}$$



Lesson 6
G:4 M:5

Area Model – Breakdown!

ZEARN STUDENT NOTES

Name: _____ Date: _____

Complete:

Class: _____

- 1** Draw an area model to show that $\frac{2}{3} = \frac{8}{12}$.

SHOW YOUR WORK



2

Draw an area model to represent 5 thirds.

Then partition it into sixths to find an equivalent fraction.

SHOW YOUR WORK

$$\frac{5}{3} = \underline{\quad}$$



Lesson 6
G:4 M:5

EXIT TICKET

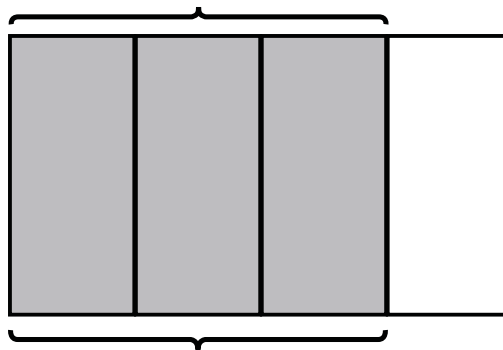
Name: _____ Date: _____


Complete:

Class: _____

1. The rectangle below represents 1 whole. Draw horizontal lines to decompose the rectangle into eighths. Use the model to give the shaded area as a sum and as a product of unit fractions. Use parentheses to show the relationship between the number sentences.

SHOW YOUR WORK



- 
2. Draw an area model to show the decomposition represented by the number sentence below.

SHOW YOUR WORK

$$\frac{4}{5} = \frac{8}{10}$$



Lesson 7
G:4 M:5

Same Area

ZEARN STUDENT NOTES

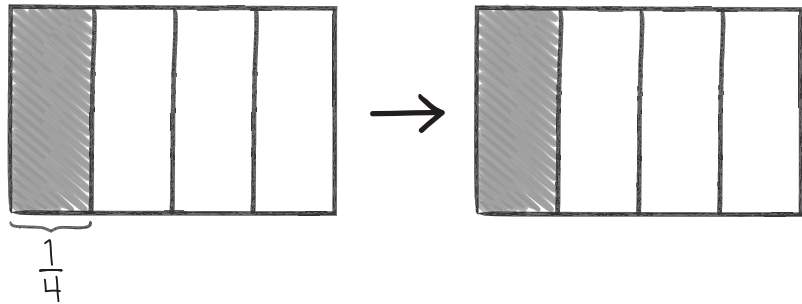
Name: _____ Date: _____

Complete:

Class: _____

- 1 Find an equivalent fraction to $\frac{1}{4}$ that has twice as many units. Use the area model and multiplication.

Area Model:



Multiplication: $\frac{1}{4} = \frac{1 \times}{4 \times} = \underline{\hspace{2cm}}$



2

Rename $\frac{1}{3}$ using ninths.

Verify that the fraction you made is equivalent to $\frac{1}{3}$ by drawing an area model.

Multiplication: $\frac{1}{3} = \frac{1 \times}{3 \times} = \underline{\hspace{2cm}}$

Area Model:



Lesson 7
G:4 M:5

EXIT TICKET

Name: _____ Date: _____

Complete:

Class: _____

1. Draw two different area models to represent $\frac{1}{4}$ by shading.

Decompose the shaded fraction into (a) eighths and (b) twelfths.

Use multiplication to show how each fraction is equivalent to $\frac{1}{4}$.

a.	b.
----	----



Lesson 8
G:4 M:5

Multiply for Equality?

ZEARN STUDENT NOTES

Name: _____ Date: _____

Complete:

Class: _____

- 1** Use multiplication to prove that $\frac{3}{5} = \frac{6}{10}$.
Then, draw an area model to confirm your number sentence.

Multiplication: $\frac{3}{5} = \frac{3 \times \quad}{5 \times \quad} = \underline{\quad}$

Area model:



EXTRA WORKSPACE



Lesson 8
G:4 M:5

EXIT TICKET

Name: _____ Date: _____

Complete:


Class: _____

1. Use multiplication to create an equivalent fraction for the fraction below.

SHOW YOUR WORK

$$\frac{2}{5}$$



- 
2. Determine if the following is a true number sentence. If needed, correct the statement by changing the right-hand side of the number sentence.

SHOW YOUR WORK

$$\frac{3}{4} = \frac{9}{8}$$



Lesson 9
G:4 M:5

Same Fraction, Fewer Parts

ZEARN STUDENT NOTES

Name: _____ Date: _____

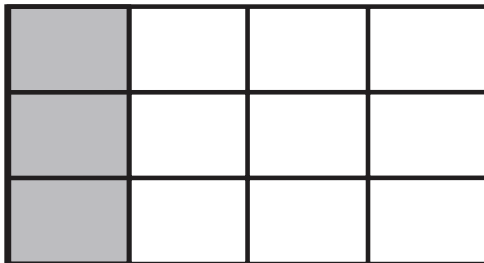
Complete:

Class: _____

- 1** Compose the shaded fraction into an equivalent fraction by circling the new unit.

Then, write a division sentence based on your composition.

SHOW YOUR WORK



$$\underline{\hspace{2cm}} = \frac{\overset{\div}{\hspace{2cm}}}{\underset{\div}{\hspace{2cm}}} = \underline{\hspace{2cm}}$$



2

Draw area models to show $\frac{2}{6}$ and $\frac{4}{12}$.

Then, find equivalent fractions.

SHOW YOUR WORK



$$\frac{2}{6} = \underline{\hspace{2cm}}$$



$$\frac{4}{12} = \underline{\hspace{2cm}}$$

EXTRA WORKSPACE



Lesson 9
G:4 M:5

EXIT TICKET

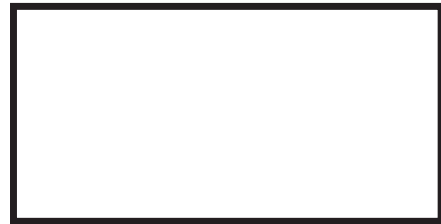
Name: _____ Date: _____

Complete:

Class: _____

1. In the first area model, show $\frac{3}{6}$. In the second area model, show $\frac{6}{12}$. Show how both fractions can be composed, or renamed, as the same unit fraction.

SHOW YOUR WORK



2. Express the equivalent fractions in a number sentence using division.

DIVISION EQUATIONS



Lesson 10
G:4 M:5

Same Fraction, Fewest Parts

ZEARN STUDENT NOTES

Name: _____ Date: _____

Complete:

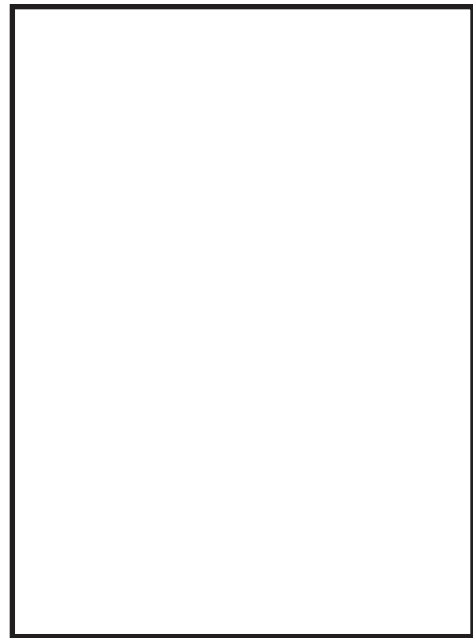
Class: _____

1

Draw an area model to represent $\frac{8}{12}$.

Then compose a fraction equivalent to $\frac{8}{12}$, with larger fractional units.

SHOW YOUR WORK



$$\frac{8}{12}$$



2

Rename $\frac{6}{12}$ with the largest units possible without using an area model.

Express the equivalence using a division number sentence.

SHOW YOUR WORK

$$\frac{6}{12} = \frac{\div}{\div} = \underline{\hspace{2cm}}$$

EXTRA WORKSPACE



Lesson 10
G:4 M:5

EXIT TICKET

Name: _____ Date: _____

Complete:

Class: _____

1. Draw an area model to show why the fractions are equivalent.
Show the equivalence in a number sentence using division.

SHOW YOUR WORK

$$\frac{4}{10} = \frac{2}{5}$$



Lesson 11
G:4 M:5

EXIT TICKET

Name: _____ Date: _____

Complete:

Class: _____

1. Partition a number line from 0 to 1 into sixths. Decompose $\frac{2}{6}$ into 4 equal lengths.

2. Write a number sentence using multiplication to show what fraction represented on the number line is equivalent to $\frac{2}{6}$.

3. Write a number sentence using division to show what fraction represented on the number line is equivalent to $\frac{2}{6}$.



Lesson 12
G:4 M:5

EXIT TICKET

Name: _____ Date: _____

Complete:

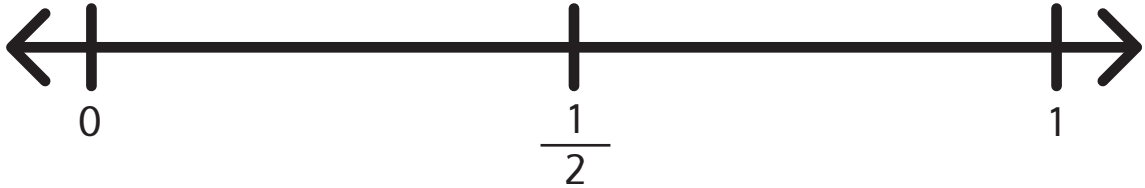
Class: _____

1. Plot the following points on the number line without measuring.

a. $\frac{8}{10}$

b. $\frac{3}{5}$

c. $\frac{1}{4}$



2. Use the number line in Problem 1 to compare the fractions by writing $>$, $<$, or $=$ in the circles.

a. $\frac{1}{4}$ ○ $\frac{1}{2}$

b. $\frac{8}{10}$ ○ $\frac{3}{5}$

c. $\frac{1}{2}$ ○ $\frac{3}{5}$

d. $\frac{1}{4}$ ○ $\frac{8}{10}$



Lesson 13
G:4 M:5

Benchmark to Compare

ZEARN STUDENT NOTES

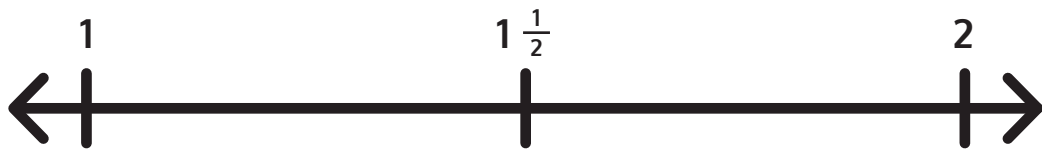
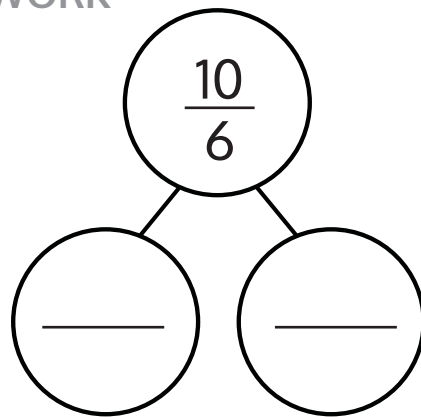
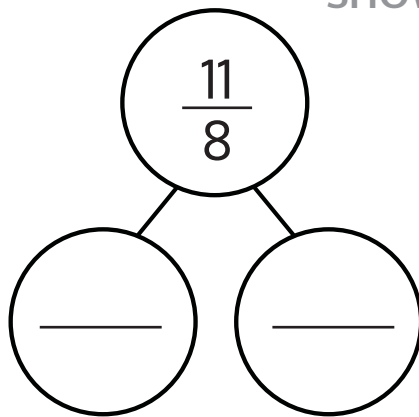
Name: _____ Date: _____

Complete:

Class: _____

1 Compare $\frac{11}{8}$ and $\frac{10}{6}$.

SHOW YOUR WORK



$\frac{11}{8}$ ○ $\frac{10}{6}$



EXTRA WORKSPACE



Lesson 13
G:4 M:5

EXIT TICKET

Name: _____ Date: _____

Complete:

Class: _____

1. Place the following fractions on the number line given.

a. $\frac{5}{4}$ b. $\frac{10}{7}$ c. $\frac{16}{9}$

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

2. Compare the fractions using $>$, $<$, or $=$.

a. $\frac{5}{4} \bigcirc \frac{10}{7}$ b. $\frac{5}{4} \bigcirc \frac{16}{9}$

c. $\frac{16}{9} \bigcirc \frac{10}{7}$



Lesson 14
G:4 M:5

Make the Same to Compare

ZEARN STUDENT NOTES

Name: _____ Date: _____

Complete:

Class: _____

- 1 Use tape diagrams to model and compare $\frac{3}{5}$ and $\frac{7}{10}$.

SHOW YOUR WORK

$\frac{3}{5}$  $\frac{3 \times}{5 \times} = \underline{\quad}$

$\frac{7}{10}$ 

Common denominator: _____ ○ _____

$\frac{3}{5}$ ○ $\frac{7}{10}$



EXTRA WORKSPACE



Lesson 14
G:4 M:5

EXIT TICKET

Name: _____ Date: _____

Complete:

Class: _____

1. Draw tape diagrams to compare the following fractions:

$$\frac{2}{5} \quad \bigcirc \quad \frac{3}{10}$$

2. Use a number line to compare the following fractions:

$$\frac{4}{3} \quad \bigcirc \quad \frac{7}{6}$$



Lesson 15
G:4 M:5

EXIT TICKET

Name: _____ Date: _____

Complete:

Class: _____

1. Draw an area model for each pair of fractions, and use it to compare the two fractions by writing $>$, $<$, or $=$ in the circle.

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

b. $\frac{2}{6}$  $\frac{3}{5}$



Lesson 16
G:4 M:5

Like Units Make It Work

ZEARN STUDENT NOTES

Name: _____ Date: _____

Complete:

Class: _____

1 5 sixths – 4 sixths = _____

SHOW YOUR WORK



_____ - _____ = _____



EXTRA WORKSPACE



Lesson 16
G:4 M:5

EXIT TICKET

Name: _____ Date: _____

Complete:

Class: _____

1. Solve. Use a number bond to decompose the difference.
Record your final answer as a mixed number.

$$\frac{16}{9} - \frac{5}{9}$$

2. Solve. Use a number bond to decompose the sum. Record your final answer as a mixed number.

$$\frac{5}{12} + \frac{10}{12}$$



Lesson 17
G:4 M:5

Whole Use

ZEARN STUDENT NOTES

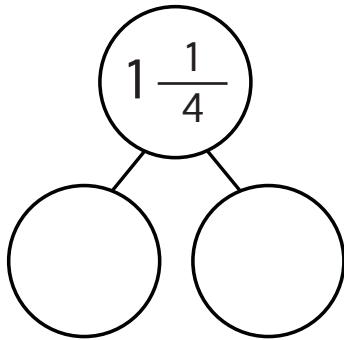
Name: _____ Date: _____

Complete:

Class: _____

1 Solve $1\frac{1}{4} - \frac{3}{4}$.

SHOW YOUR WORK



$$1\frac{1}{4} = \underline{\quad} + \underline{\quad} = \underline{\quad}$$

1

A large empty rectangular box for showing work, with a horizontal line above it and a vertical line extending upwards from the top center of the box to the number 1 above it.

$$1\frac{1}{4} - \frac{3}{4} = \underline{\quad}$$



EXTRA WORKSPACE



Lesson 17
G:4 M:5

EXIT TICKET

Name: _____ Date: _____

Complete:

Class: _____

1. Solve. Model the problem with a number line, and solve by both counting up and subtracting.

$$1 - \frac{2}{5}$$

2. Find the difference in two ways. Use a number bond to show the decomposition.

$$1\frac{2}{7} - \frac{5}{7}$$



Lesson 18
G:4 M:5

Three's Company

ZEARN STUDENT NOTES

Name: _____ Date: _____

Complete:

Class: _____

1 $\frac{1}{6} + \frac{4}{6} + \frac{2}{6}$

SHOW YOUR WORK



2

Mrs. Cashmore bought a melon that weighed $1\frac{3}{5}$ pounds. She cut a piece that weighed $\frac{4}{5}$ pound and gave it to her neighbor. She then had $\frac{1}{5}$ pound as a snack.

How much of the melon is left?

DRAW

SOLVE



Lesson 18
G:4 M:5

EXIT TICKET

Name: _____ Date: _____

Complete:

Class: _____

1. Solve the following problems. Use number bonds to help you.

a. $\frac{5}{9} + \frac{2}{9} + \frac{4}{9}$

b. $1 - \frac{5}{8} - \frac{1}{8}$



Lesson 19
G:4 M:5

EXIT TICKET

Name: _____ Date: _____


Complete: Class: _____

Use the RDW process to solve.

1. Mrs. Smith took her bird to the vet. Tweety weighed $1\frac{3}{10}$ pounds. The vet said that Tweety weighed $\frac{4}{10}$ pound more last year. How much did Tweety weigh last year?

SHOW YOUR WORK



- 
2. Hudson picked $1\frac{1}{4}$ baskets of apples. Suzy picked 2 baskets of apples. How many more baskets of apples did Suzy pick than Hudson?

SHOW YOUR WORK



Lesson 20
G:4 M:5

Like Units, Like Sum

ZEARN STUDENT NOTES

Name: _____ Date: _____

Complete:

Class: _____

- 1 $\frac{1}{2} + \frac{1}{8}$. Use the tape diagrams to help you solve.

SHOW YOUR WORK

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

$$\frac{1}{8}$$

$$\frac{1}{2} + \frac{1}{8} = \underline{\quad} + \underline{\quad} = \underline{\quad}$$



EXTRA WORKSPACE



Lesson 20
G:4 M:5

EXIT TICKET

Name: _____ Date: _____

Complete:

Class: _____

1. Draw a number line to model the addition. Solve, and then write a complete number sentence.

SHOW YOUR WORK

$$\frac{5}{8} + \frac{2}{4}$$





2. Solve without drawing a model.

SHOW YOUR WORK

$$\frac{3}{4} + \frac{1}{2}$$



Lesson 21
G:4 M:5

Sum It Up

ZEARN STUDENT NOTES

Name: _____ Date: _____

Complete:

Class: _____

1

Draw a number bond to show $\frac{9}{6}$ as a whole and parts.

Then, use your number bond to write $\frac{9}{6}$ as a mixed number.

SHOW YOUR WORK

$$\frac{9}{6} = \underline{\quad} + \underline{\quad} = \underline{\quad}$$



EXTRA WORKSPACE



Lesson 21
G:4 M:5

EXIT TICKET

Name: _____ Date: _____

Complete: Class: _____

1. Solve. Write a complete number sentence. Use a number bond to write each sum as a mixed number. Use a model if needed.

a. $\frac{1}{4} + \frac{7}{8}$

b. $\frac{2}{3} + \frac{7}{12}$



Lesson 22
G:4 M:5

Fraction To/Fraction From

ZEARN STUDENT NOTES

Name: _____ Date: _____

Complete:

Class: _____

1 Draw a tape diagram to represent $2 + \frac{1}{2}$.

$$2 + \frac{1}{2} = \underline{\hspace{2cm}}$$

2 Draw a tape diagram to represent $3 - \frac{1}{4}$.

$$3 - \frac{1}{4} = \underline{\hspace{2cm}}$$



3

Solve $7 - \frac{3}{5}$ using a number bond. Then, use the number line to represent your number sentence.

SHOW YOUR WORK

$$\begin{array}{c} 7 \\ \diagdown \quad \diagup \\ \text{---} \quad \text{---} \end{array} - \frac{3}{5} = \text{---}$$

--- ---



EXTRA WORKSPACE



Lesson 22
G:4 M:5

EXIT TICKET

Name: _____ Date: _____

Complete:

Class: _____

1. Complete the subtraction sentences using number bonds.
Draw a model if needed.

a. $6 - \frac{1}{5} = \underline{\hspace{2cm}}$

b. $8 - \frac{5}{6} = \underline{\hspace{2cm}}$

c. $7 - \frac{5}{8} = \underline{\hspace{2cm}}$



Lesson 23
G:4 M:5

Fraction Build-up

ZEARN STUDENT NOTES

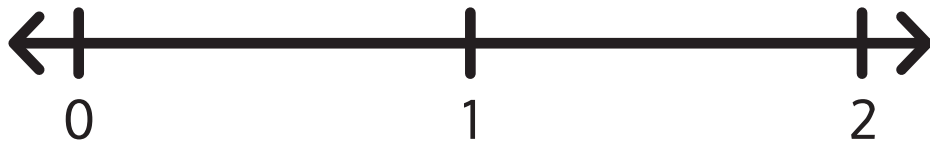
Name: _____ Date: _____

Complete:

Class: _____

- 1 Show that $10 \times \frac{1}{5} = 2 \times \frac{5}{5} = 2$ on the number line.

SHOW YOUR WORK



2

Multiply $8 \times \frac{1}{3}$ and write the product as a mixed number.
Draw a number line to support your answer.

$$8 \times \frac{1}{3} = \underline{\hspace{2cm}}$$

NUMBER LINE

EXTRA WORKSPACE



Lesson 23
G:4 M:5

EXIT TICKET

Name: _____ Date: _____

Complete:

Class: _____

1. Multiply and write the product as a mixed number. Draw a number line to support your answer.

a. $8 \times \frac{1}{2}$

b. 7 copies of 1 fourth

c. $13 \times \frac{1}{3}$



Lesson 24
G:4 M:5

EXIT TICKET

Name: _____ Date: _____

Complete:

Class: _____

1. Rename the fraction as a mixed number by decomposing it into two parts. Model the decomposition with a number line and a number bond.

$$\frac{17}{5}$$

2. Convert the fraction to a mixed number. Model with a number line.

$$\frac{19}{3}$$





3. Convert the fraction to a mixed number.

$$\frac{11}{4}$$



Lesson 25
G:4 M:5

Form Follows Function

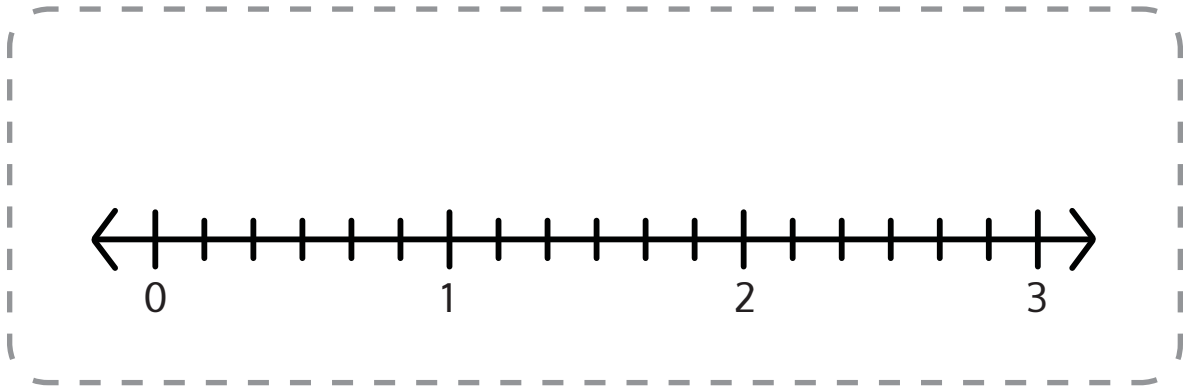
ZEARN STUDENT NOTES

Name: _____ Date: _____

Complete:

Class: _____

- 1** On the number line, show how many sixths it takes to go from 0 to $2\frac{1}{6}$.



- 2** Convert $2\frac{2}{3}$ into a fraction greater than 1 using multiplication.

$$2\frac{2}{3} = (\quad \times \quad) + \frac{2}{3}$$
$$= \quad + \quad$$
$$= \quad$$



EXTRA WORKSPACE



Lesson 25
G:4 M:5

EXIT TICKET

Name: _____ Date: _____

Complete:

Class: _____

1. Convert each mixed number to a fraction greater than 1.

a. $3\frac{1}{5}$

b. $2\frac{3}{5}$

c. $4\frac{2}{9}$



Lesson 26
G:4 M:5

Benchmark Boogie

ZEARN STUDENT NOTES

Name: _____ Date: _____

Complete:

Class: _____

1 Convert $\frac{43}{8}$ and $\frac{35}{6}$ to mixed numbers and compare them.

SHOW YOUR WORK

$$\frac{43}{8} = \underline{\hspace{2cm}}$$

$$\frac{35}{6} = \underline{\hspace{2cm}}$$

$$\underline{\hspace{1cm}} \bigcirc \frac{1}{2}$$

$$\underline{\hspace{1cm}} \bigcirc \frac{1}{2}$$

$$\underline{\hspace{2cm}} \bigcirc \underline{\hspace{2cm}}$$



EXTRA WORKSPACE



Lesson 26
G:4 M:5

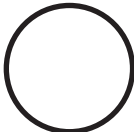
EXIT TICKET

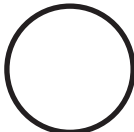
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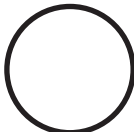
Complete: Class: _____

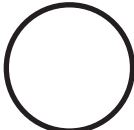
1. Compare the fractions given below by writing $>$, $<$, or $=$.

Give a brief explanation for each answer, referring to benchmark fractions.

a. $3\frac{2}{3}$  $3\frac{4}{6}$

b. $\frac{12}{3}$  $\frac{27}{7}$

c. $\frac{10}{6}$  $\frac{5}{4}$

d. $3\frac{2}{5}$  $3\frac{3}{10}$



Lesson 27
G:4 M:5

We Like Units

ZEARN STUDENT NOTES

Name: _____ Date: _____

Complete:

Class: _____

- 1** Draw tape diagrams of $\frac{2}{6}$ and $\frac{3}{12}$ to compare $2\frac{2}{6}$ and $2\frac{3}{12}$.

Which number is bigger?

SHOW YOUR WORK



$\frac{2}{6}$



$\frac{3}{12}$

Common denominator: _____ ○ _____

$2\frac{2}{6}$ ○ $2\frac{3}{12}$



EXTRA WORKSPACE



Lesson 27
G:4 M:5


EXIT TICKET

Name: _____ Date: _____

Complete:

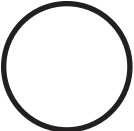
Class: _____

1. Compare each pair of fractions using $>$, $<$, or $=$ using any strategy.

a. $4\frac{3}{8}$  $4\frac{1}{4}$

b. $3\frac{4}{5}$  $3\frac{9}{10}$

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

d. $10\frac{2}{5}$  $10\frac{3}{4}$



Lesson 28
G:4 M:5

Spotting and Plotting

ZEARN STUDENT NOTES

Name: _____ Date: _____

Complete:

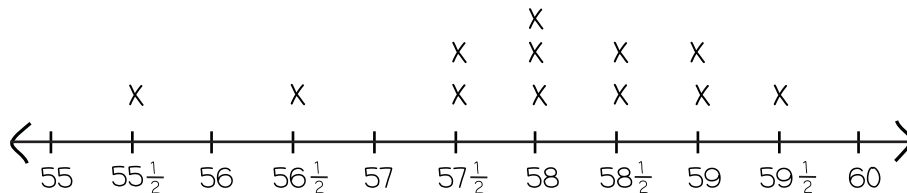
Class: _____

1 Mr. O'Neil's science class is growing sunflowers. The table and line plot show how tall each plant grew.

What is the height difference between the tallest and shortest plant?

Height of Sunflower Plants (Inches)

$55\frac{1}{2}$	58	$58\frac{1}{2}$	59
58	$59\frac{1}{2}$	$57\frac{1}{2}$	$56\frac{1}{2}$
$57\frac{1}{2}$	$58\frac{1}{2}$	59	58



x = 1 sunflower plant

SOLVE



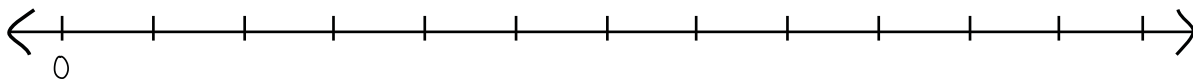
2

The chart shows the distance fourth-graders in Ms. Smith's class were able to run without stopping.

Create a line plot to display the data in the table.

Then, use the line plot to answer: How much further did Jack run than Arianna?

Student	Distance (miles)
Joe	$2\frac{3}{4}$
Arianna	$1\frac{3}{4}$
Bobbi	$2\frac{1}{4}$
Morgan	$1\frac{1}{2}$
Jack	$2\frac{1}{2}$
Saisha	$2\frac{1}{4}$
Tyler	$2\frac{2}{4}$
Jenny	$\frac{2}{4}$
Anson	$\frac{4}{4}$
Chandra	$\frac{4}{2}$



SOLVE



Lesson 28
G:4 M:5

EXIT TICKET

Name: _____ Date: _____

Complete:

Class: _____

Mr. O'Neil asked his students to record the length of time they read over the weekend. The times are listed in the table.

1. At the bottom of the page, make a line plot of the data.
2. One of the students read $\frac{3}{4}$ hour on Friday, $\frac{3}{4}$ hour on Saturday, and $\frac{3}{4}$ hour on Sunday. How many hours did that student read over the weekend? Name that student.

Student	Length of time (in hours)
Robin	$\frac{1}{2}$
Bill	1
Katrina	$\frac{3}{4}$
Kelly	$1\frac{3}{4}$
Mary	$1\frac{1}{2}$
Gail	$2\frac{1}{4}$
Scott	$1\frac{3}{4}$
Ben	$2\frac{2}{4}$



Lesson 29
G:4 M:5

EXIT TICKET

Name: _____ Date: _____

Complete:

Class: _____

1. Estimate each sum or difference to the nearest half or whole number by rounding. Explain your estimate using words or a number line.

SHOW YOUR WORK

a. $2\frac{9}{10} + 2\frac{1}{4} \approx$ _____

b. $11\frac{8}{9} - 3\frac{3}{8} \approx$ _____



Lesson 30
G:4 M:5

Sum Mixed, Sum Not

ZEARN STUDENT NOTES

Name: _____ Date: _____

Complete:

Class: _____

1 How much do we need to add to $3\frac{1}{8}$ to make a whole?

SHOW YOUR WORK



$$3\frac{1}{8} + \underline{\quad\quad} = 4$$



EXTRA WORKSPACE



Lesson 30
G:4 M:5

EXIT TICKET

Name: _____ Date: _____

Complete:

Class: _____

1. Solve.

a. $3\frac{2}{5} + \underline{\hspace{2cm}} = 4$

b. $2\frac{3}{8} + \frac{7}{8}$



Lesson 31
G:4 M:5

Mixed Sums

ZEARN STUDENT NOTES

Name: _____ Date: _____

Complete:

Class: _____

1 Solve by adding like units.

SHOW YOUR WORK

$$4 \frac{2}{3} + 3 \frac{1}{3} + 5 \frac{2}{3} =$$



EXTRA WORKSPACE



Lesson 31
G:4 M:5

EXIT TICKET

Name: _____ Date: _____

Complete:

Class: _____

1. Solve.

a. $2\frac{3}{8} + 1\frac{5}{8}$

b. $3\frac{4}{5} + 2\frac{3}{5}$



Lesson 32
G:4 M:5

Count Back to Subtract

ZEARN STUDENT NOTES

Name: _____ Date: _____

Complete:

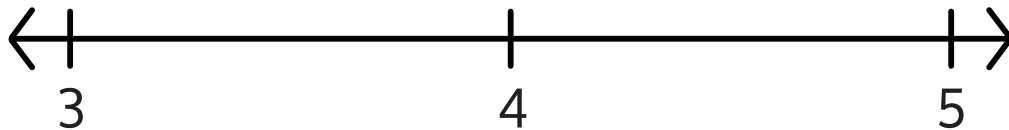
Class: _____

- 1 Solve by decomposing and subtracting.

SHOW YOUR WORK

$$4\frac{1}{5} - \frac{3}{5} = \underline{\hspace{2cm}}$$

$$\frac{1}{5} \quad \underline{\hspace{1cm}}$$



EXTRA WORKSPACE



Lesson 32
G:4 M:5

EXIT TICKET

Name: _____ Date: _____

Complete:

Class: _____

1. Solve.

SHOW YOUR WORK

a. $10\frac{5}{6} - \frac{4}{6}$

b. $8\frac{3}{8} - \frac{6}{8}$



Lesson 33
G:4 M:5

Break Down to Subtract

ZEARN STUDENT NOTES

Name: _____ Date: _____

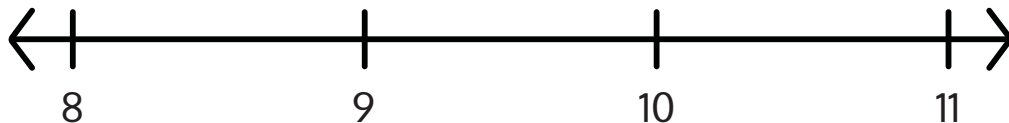
Complete:

Class: _____

1 Solve by subtracting like units.

SHOW YOUR WORK

$$10\frac{1}{5} - 1\frac{3}{5} =$$



EXTRA WORKSPACE



Lesson 33
G:4 M:5

EXIT TICKET

Name: _____ Date: _____

Complete:

Class: _____

1. Solve using any strategy.

a. $4\frac{2}{3} - 2\frac{1}{3}$

SHOW YOUR WORK

b. $12\frac{5}{8} - 8\frac{7}{8}$



Lesson 35
G:4 M:5

Associate How You Like

ZEARN STUDENT NOTES

Name: _____ Date: _____

Complete:

Class: _____

1 Solve numerically and using unit form.

SHOW YOUR WORK

$$5 \times \frac{3}{4}$$



EXTRA WORKSPACE



Lesson 35
G:4 M:5

EXIT TICKET

Name: _____ Date: _____

Complete:

Class: _____

1. Solve using unit form.

$$5 \times \frac{2}{3}$$

SHOW YOUR WORK

2. Solve.

$$11 \times \frac{5}{6}$$

SHOW YOUR WORK



Lesson 36
G:4 M:5

Fast Times

ZEARN STUDENT NOTES

Name: _____ Date: _____

Complete:

Class: _____

- 1** Rhonda exercised for $\frac{5}{6}$ hour every day for 5 days.
How many total hours did Rhonda exercise?

DRAW

SOLVE

She exercised _____ hours in 5 days.



2

Six friends each drank $\frac{2}{3}$ cup of juice.

If a bottle of juice contains 3 cups, how many bottles of juice were needed?

DRAW

SOLVE

The friends drank _____ cups.

_____ bottles of juice were needed.



Lesson 36
G:4 M:5

EXIT TICKET

Name: _____ Date: _____

Complete:

Class: _____

1. Solve using any strategy.

a. $7 \times \frac{3}{4}$

SHOW YOUR WORK

b. $9 \times \frac{2}{5}$

c. $60 \times \frac{5}{8}$



Lesson 37
G:4 M:5

Multiply Mix

ZEARN STUDENT NOTES

Name: _____ Date: _____

Complete:

Class: _____

- 1 Draw a tape diagram showing $3\frac{1}{5}$. Then, draw another copy of the tape diagram.

Use your drawing to solve $2 \times 3\frac{1}{5}$.

DRAW



SOLVE

$$2 \times 3\frac{1}{5} = (\quad \times \quad) + (\quad \times \quad)$$

$$= \quad + \quad$$

$$= \quad$$



2

In April, Jenny ran in a marathon as part of a relay team. She ran $6\frac{55}{100}$ miles. In September, Jenny ran 4 times as far to complete a marathon on her own.

How far did Jenny run in September?

DRAW

SOLVE



Lesson 37
G:4 M:5

EXIT TICKET

Name: _____ Date: _____

Complete:

Class: _____

1. Multiply. Write each product as a mixed number.

a. $4 \times 5\frac{3}{8}$

b. $4\frac{3}{10} \times 3$



Lesson 39
G:4 M:5

Prepare to Compare

ZEARN STUDENT NOTES

Name: _____ Date: _____

Complete:

Class: _____

- 1** Natasha's sculpture was $5\frac{2}{10}$ inches tall. Maya's sculpture was 4 times as tall.

How much taller was Maya's sculpture than Natasha's?

DRAW

SOLVE

Maya's sculpture was _____ inches taller than Natasha's sculpture.



EXTRA WORKSPACE



Lesson 39
G:4 M:5

EXIT TICKET

Name: _____ Date: _____

Complete: Class: _____

Use the RDW process to solve.

1. Jeff has ten packages that he wants to mail. Nine identical packages weigh $2\frac{7}{8}$ pounds each. A tenth package weighs two times as much as one of the other packages. How many pounds do all ten packages weigh?

SHOW YOUR WORK



Lesson 40
G:4 M:5

Plotting Along

ZEARN STUDENT NOTES

Name: _____ Date: _____

Complete:

Class: _____

- 1** The chart shows the yearly rainfall for Boulder, Colorado. Use the data to create a line plot.

What is the difference in rainfall between the wettest and driest years?

Year	Rainfall (meters)
2007	$2\frac{4}{6}$
2008	$2\frac{1}{3}$
2009	$1\frac{4}{6}$
2010	$2\frac{2}{3}$
2011	$2\frac{3}{6}$
2012	$1\frac{2}{6}$
2013	$1\frac{2}{3}$
2014	$2\frac{5}{6}$

DRAW

SOLVE



2

In which year did it rain twice as much as 2012?

SHOW YOUR WORK



Lesson 40
G:4 M:5

EXIT TICKET

Name: _____ Date: _____

Complete:

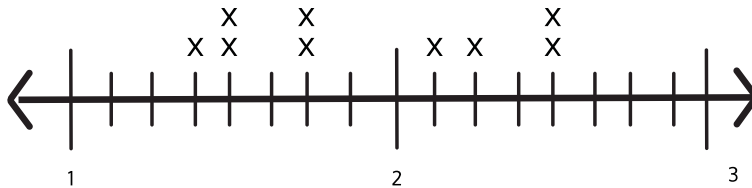
Class: _____

1. Coach Taylor asked his team to record the distance they ran during practice. The distances are listed in the table.

a. Use the table to locate the incorrect data on the line plot.

Circle any incorrect points.

Mark any missing points.



Distance (in miles)

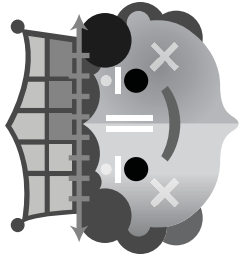
x = 1 team member

Team Members	Distance (In Miles)
Alec	$1 \frac{3}{4}$
Henry	$1 \frac{1}{2}$
Charles	$2 \frac{1}{8}$
Steve	$1 \frac{3}{4}$
Pitch	$2 \frac{2}{4}$
Raj	$1 \frac{6}{8}$
Pam	$2 \frac{1}{2}$
Tony	$1 \frac{3}{8}$

b. Of the team members who ran $1 \frac{6}{8}$ miles, how many miles did those team members run combined?



Z>EARN



Congratulations!
You completed

Grade 4 Mission 5
Equivalent Fractions

.....
Name

.....
Date



Zearned it!

