

# Eureka Math

## 4th Grade Module 5 Lesson 30

At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this project!

Directions for customizing presentations are available on the next slide.



This work by Bethel School District ([www.bethelsd.org](http://www.bethelsd.org)) is licensed under the Creative Commons Attribution Non-Commercial Share-Alike 4.0 International License. To view a copy of this license, visit <http://creativecommons.org/licenses/by/4.0/>. Bethel School District Based this work on Eureka Math by Common Core (<http://greatminds.net/maps/math/copyright>) Eureka Math is licensed under a Creative Commons Attribution Non-Commercial-ShareAlike 4.0 License.

# Icons



Read, Draw, Write



Learning Target



Personal White Board



Problem Set



Manipulatives Needed



Fluency



Think Pair Share



Whole Class



Individual



Partner



Small Group



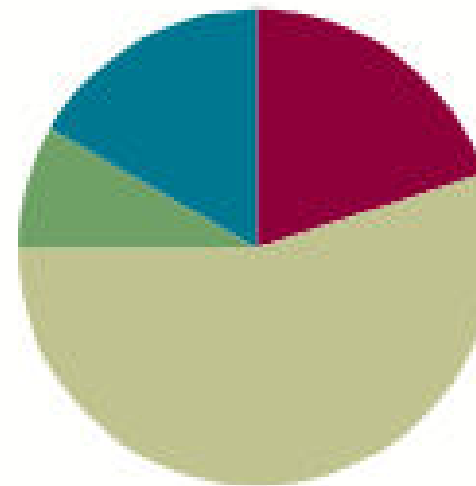
Small Group Time

# Lesson 30

Objective: Add a mixed number and a fraction.

## Suggested Lesson Structure

■ Fluency Practice	(12 minutes)
■ Application Problem	(5 minutes)
■ Concept Development	(33 minutes)
■ Student Debrief	(10 minutes)
<b>Total Time</b>	<b>(60 minutes)</b>





Add a mixed number and a fraction



# Sprints!!



# Compare fractions

$$19/5 \quad \underline{\hspace{1cm}} \quad 12/3$$

How many wholes are in  $19/5$ ?

What about  $12/3$

Does this help you compare these two numbers?



# Application Problem

One board measures 2 meters 70 centimeters. Another measures 87 centimeters. What is the total length of the two boards expressed in meters and centimeters?



# Adding in unit form

$$2 \frac{3}{8} + \frac{3}{8}$$

2 ones 3 eighths + 3 eighths

Add your ones and eighths. What do you get?

Can we keep it this way?

Let's show this on a number too!!





# Adding in unit form

$$2 \frac{3}{8} + \frac{5}{8}$$

Let's show this on a number!!



# Adding fractions

When we are adding fractions we sometimes like to complete the whole.

How do we know when we have made or completed the whole?

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

What do we need to complete the whole?

What about when we have  $3 \frac{1}{8}$ ?

How do you know?



# Adding fractions

Practice completing the whole

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

$$6 = 5 \frac{1}{8} + \underline{\hspace{2cm}}$$



# Adding fractions

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

When adding we can add our fractional units first.

What do we get when add  $\frac{2}{4} + \frac{3}{4}$ ?

We the need to add that to our whole number.

What do we get when we add  $5 + \frac{5}{4}$ ?

Can we leave it that way?

What must we do?!?!?



# Adding fractions

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

Can we add these numbers right now? How do you know?

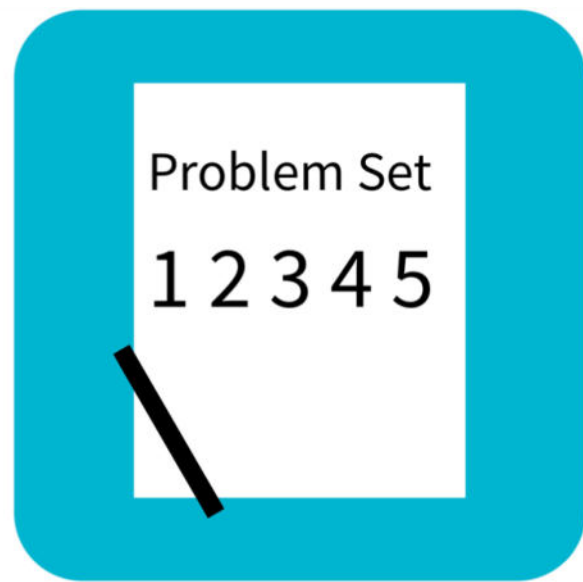
Let's look at  $5 \frac{2}{4}$ . How many fourths do we need to complete the whole?

Do we have enough in  $\frac{3}{4}$  to do that?

When we take  $\frac{2}{4}$  away from  $\frac{3}{4}$  to complete our whole how many do we have left?

We add those left overs to our completed whole of 6 and end up with our answer.

What do we get?



# Problem Set

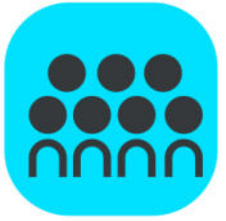
Name \_\_\_\_\_

Date \_\_\_\_\_

1. Solve.

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

b.  $7\frac{3}{4} + \frac{1}{4}$



# Debrief

- Explain how decomposing mixed numbers helps you to find their sum.
- Explain how you solved Problem 1(d).
- Explain the challenge in solving Problem 4(d). What strategy did you use?
- If you were unsure of any answer on this Problem Set, what could you do to see if your answer is reasonable? Would drawing a picture or estimating the sum or difference be helpful?
- How does Problem 4(g) relate to the Application Problem?

# Exit Ticket

Name \_\_\_\_\_

Date \_\_\_\_\_

Solve.

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