

Lesson 11:

Add mixed numbers with unrelated units.

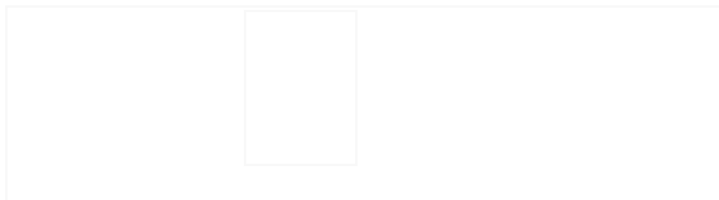
CCSS Standard – 5.NF.A.1 / 5.NF.A.2

FLUENCY (10-min)

Whiteboard Exchange: Make the Next Whole Number

Write and complete the equation.

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



FLUENCY (10-min)

Whiteboard Exchange: Make the Next Whole Number

Write and complete the equation.

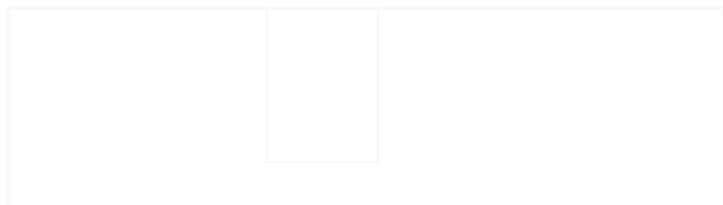
$$\underline{\quad} + \frac{3}{5} = 1$$

FLUENCY (10-min)

Whiteboard Exchange: Make the Next Whole Number

Write and complete the equation.

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



FLUENCY (10-min)

Whiteboard Exchange: Make the Next Whole Number

Write and complete the equation.

$$\underline{\quad} + \frac{4}{10} = 1$$

FLUENCY (15-min)

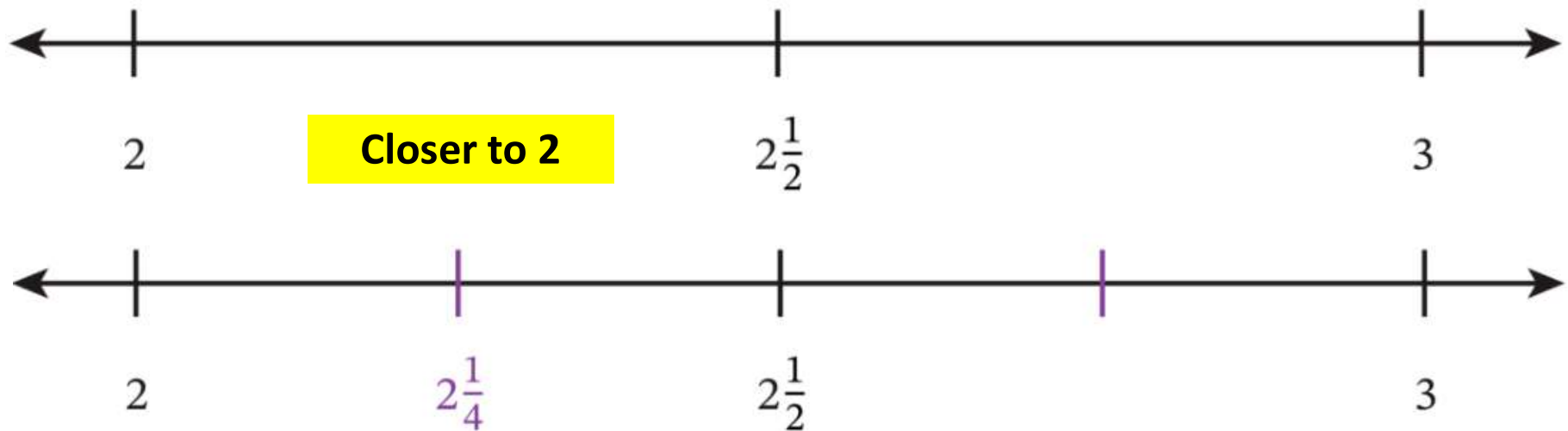
Choral Response: Closer to 2 or 3?

Think about where $2\frac{1}{4}$ is located on the number line.

Is $2\frac{1}{4}$ closer to 2 or 3?

Raise your hand when you know?

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



FLUENCY (15-min)

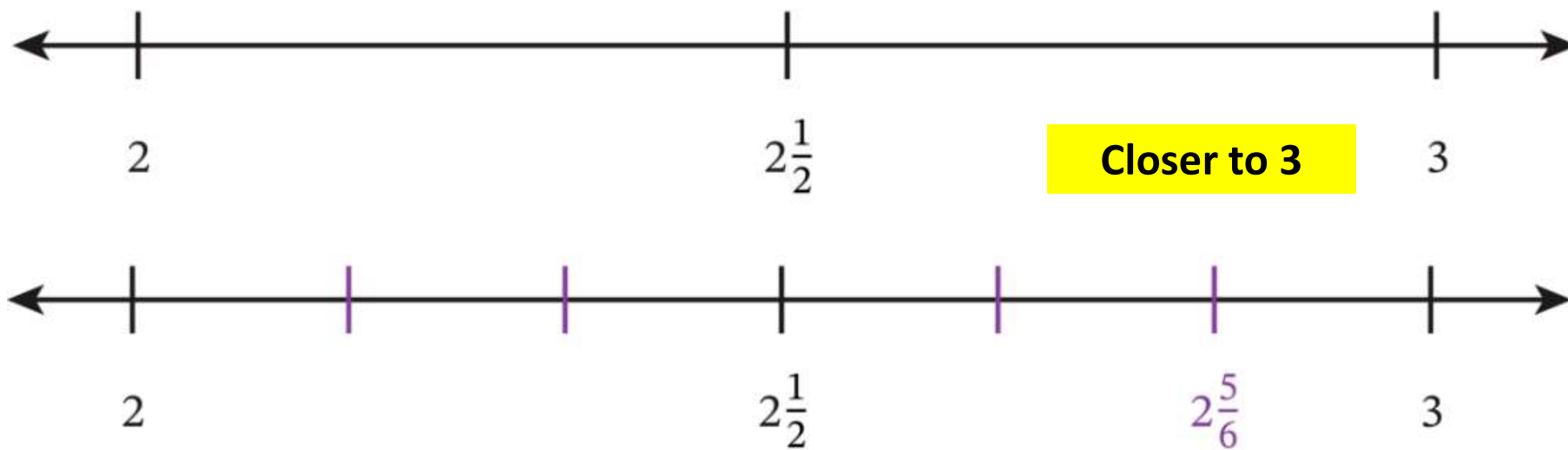
Choral Response: Closer to 2 or 3?

Think about where $2\frac{5}{6}$ is located on the number line.

Is $2\frac{5}{6}$ closer to 2 or 3?

Raise your hand when you know?

$$2\frac{5}{6}$$



FLUENCY (15-min)

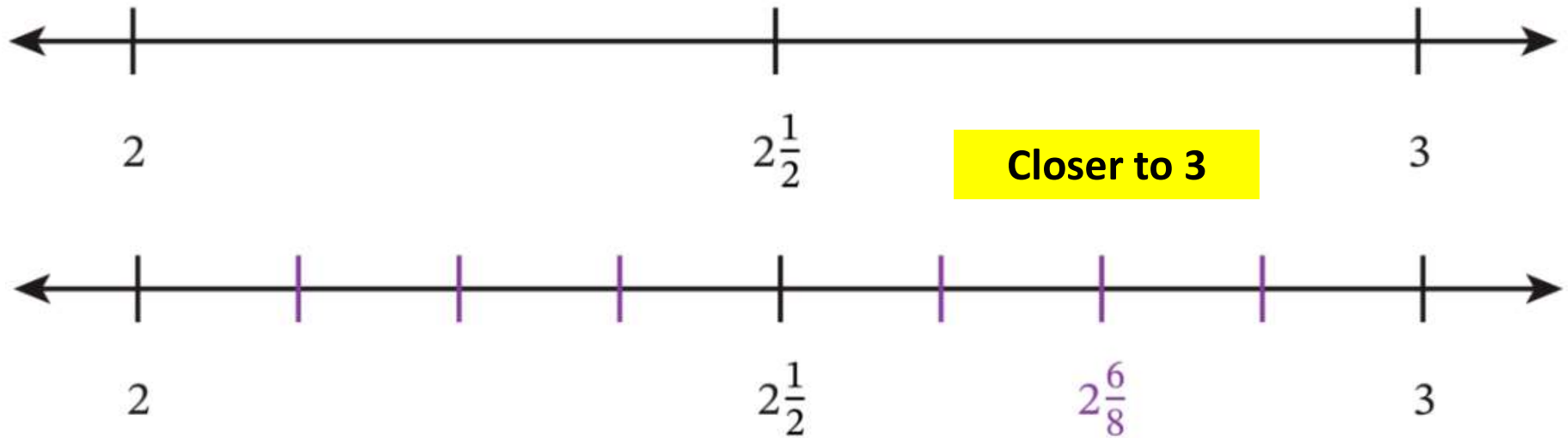
Choral Response: Closer to 2 or 3?

Think about where $2\frac{6}{8}$ is located on the number line.

Is $2\frac{6}{8}$ closer to 2 or 3?

Raise your hand when you know?

$$2\frac{6}{8}$$



FLUENCY (15-min)

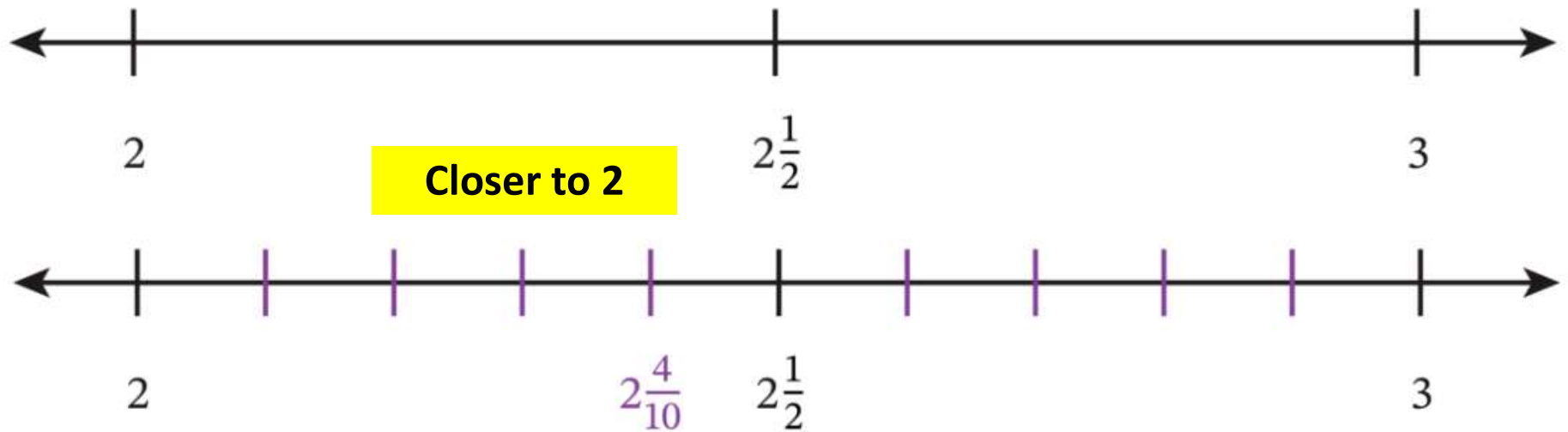
Choral Response: Closer to 2 or 3?

Think about where $2\frac{4}{10}$ is located on the number line.

Is $2\frac{4}{10}$ closer to 2 or 3?

Raise your hand when you know?

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



FLUENCY (15-min)

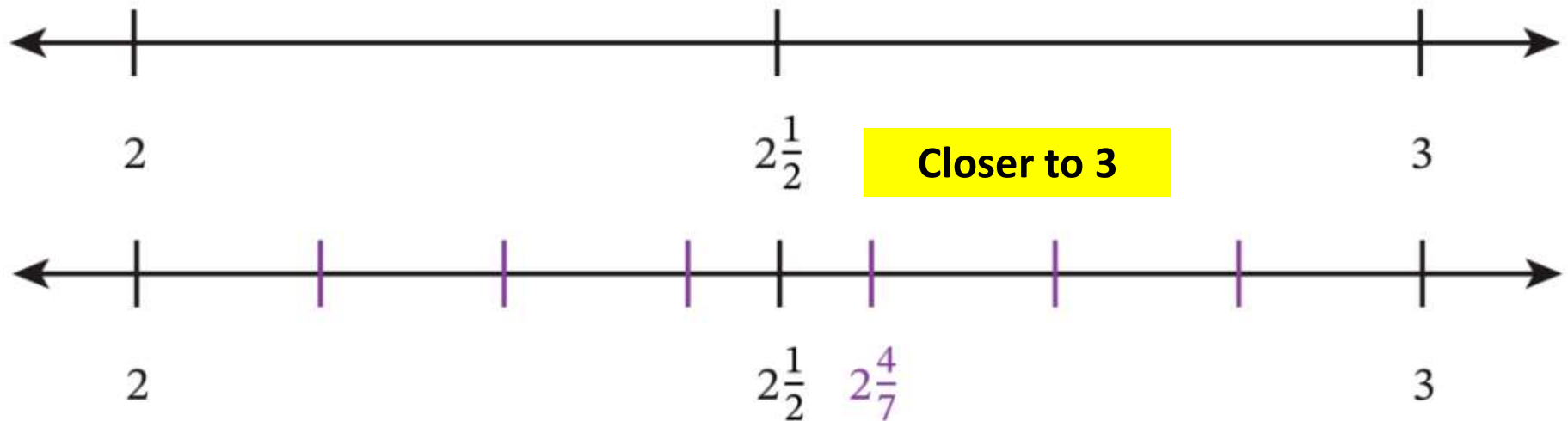
Choral Response: Closer to 2 or 3?

Think about where $2\frac{4}{7}$ is located on the number line.

Is $2\frac{4}{7}$ closer to 2 or 3?

Raise your hand when you know?

$$2\frac{4}{7}$$



FLUENCY (15-min)

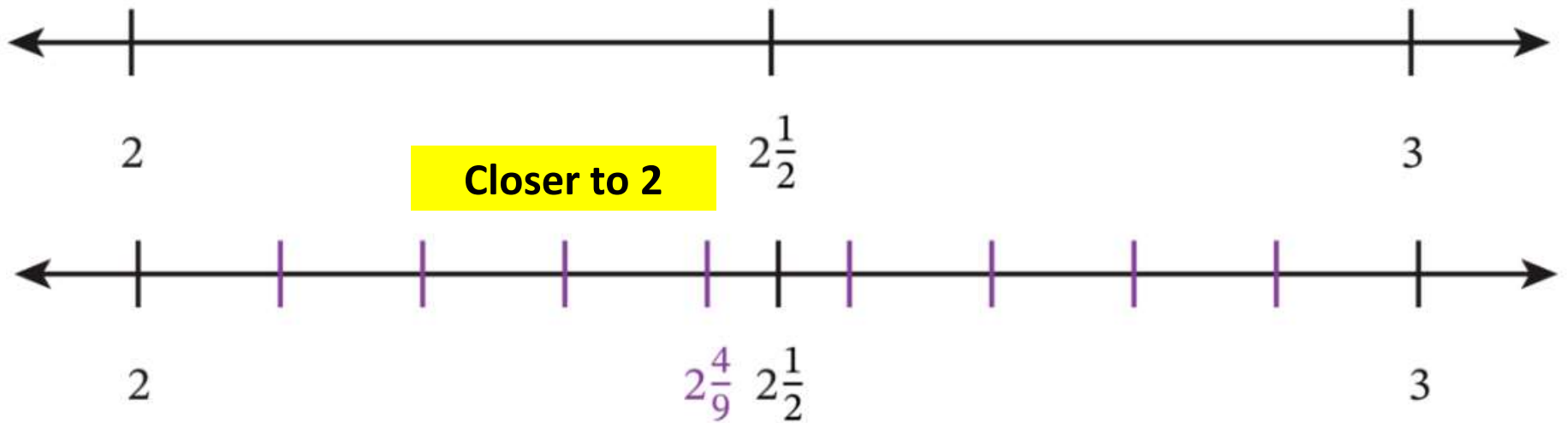
Choral Response: Closer to 2 or 3?

Think about where $2\frac{4}{9}$ is located on the number line.

Is $2\frac{4}{9}$ closer to 2 or 3?

Raise your hand when you know?

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



FLUENCY (15-min)

Whiteboard Exchange: Make Like Units

Which fraction can we rename so the fractional units are the same?

Raise your hand when you know.

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

Rename $\frac{1}{2}$ into fourths
to make LIKE units.

Now, rewrite the addition
expression showing both
fractions with the same
unit.

FLUENCY (15-min)

Whiteboard Exchange: Make Like Units

Which fraction can we rename so the fractional units are the same?

Raise your hand when you know.

$$\frac{1}{6} + \frac{1}{3}$$

Rename $\frac{1}{3}$ into sixths to make LIKE units.

Now, rewrite the addition expression showing both fractions with the same unit.

FLUENCY (15-min)

Whiteboard Exchange: Make Like Units

Which fraction can we rename so the fractional units are the same?

Raise your hand when you know.

$$\frac{3}{4} + \frac{3}{8}$$

Rename $\frac{3}{4}$ into eighths
to make LIKE units.

Now, rewrite the addition
expression showing both
fractions with the same
unit.

FLUENCY (15-min)

Whiteboard Exchange: Make Like Units

Which fraction can we rename so the fractional units are the same?

Raise your hand when you know.

$$\frac{5}{9} + \frac{2}{3}$$

Rename $\frac{2}{3}$ into ninths
to make LIKE units.

Now, rewrite the addition
expression showing both
fractions with the same
unit.

LAUNCH (5-min)

Solve a word problem involving MIXED NUMBERS with UNRELATED units.

LEARN BOOK – PAGE 97

Use the Read-Draw-Write process to solve the problem.

A banana muffin recipe uses $2\frac{1}{3}$ cups of flour. A blueberry muffin recipe uses $2\frac{3}{4}$ cups of flour.

How many cups of flour are needed to make both recipes?

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

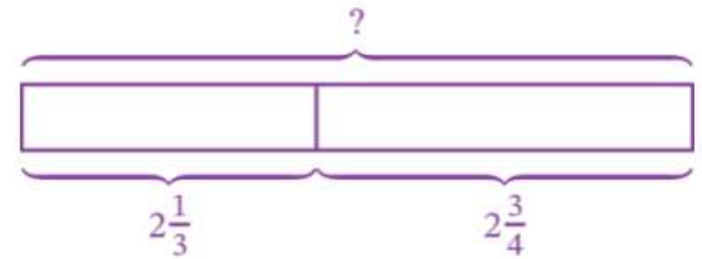
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$$2\frac{?}{12} + 2\frac{?}{12}$$

Are the units related or unrelated?

How will you decide what unit to use when you rename the fractions?

$$2\frac{4}{12} + 2\frac{9}{12} = 4\frac{13}{12} = 5\frac{1}{12}$$



$$2\frac{1}{3} + 2\frac{3}{4} = 2\frac{4}{12} + 2\frac{9}{12}$$

\swarrow \searrow
 $2\frac{1}{12}$ $\frac{3}{12}$

$$2\frac{9}{12} + \frac{3}{12} = 3$$

$$3 + 2\frac{1}{12} = 5\frac{1}{12}$$

LEARN (35-min)

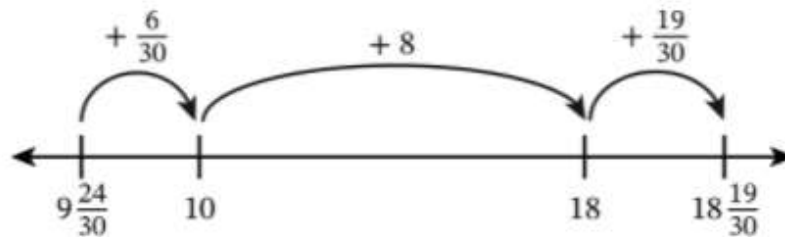
Mixed Number Addition and Application

You are going to ROTATE through 3 stations with a partner every 3 minutes. The stations are ordered from simple to complex.

Station #1: Rename to Add

$$5\frac{7}{9} + 3\frac{2}{4}$$

Station #2: Write an Equation to Match a Model



Station #3: Create a Word Problem to Match an Expression

$$7\frac{1}{3} + 6\frac{11}{16}$$

LEARN (35-min)

Mixed Number Addition and Application

Gallery Walk

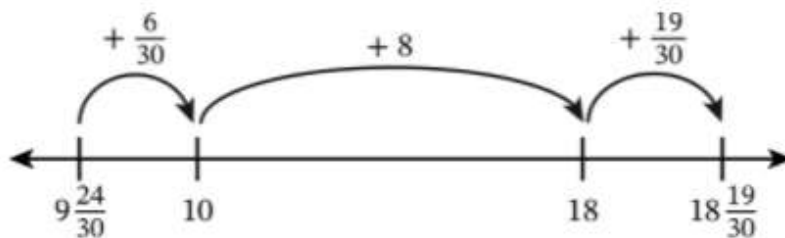
How does the work of others differ from your group's work?

What did you notice about equations other groups wrote?

Station #1: Rename to Add

$$5\frac{7}{9} + 3\frac{2}{4}$$

Station #2: Write an Equation to Match a Model



Station #3: Create a Word Problem to Match an Expression

$$7\frac{1}{3} + 6\frac{11}{16}$$

LEARN (35-min)**Mixed Number Addition and Application**

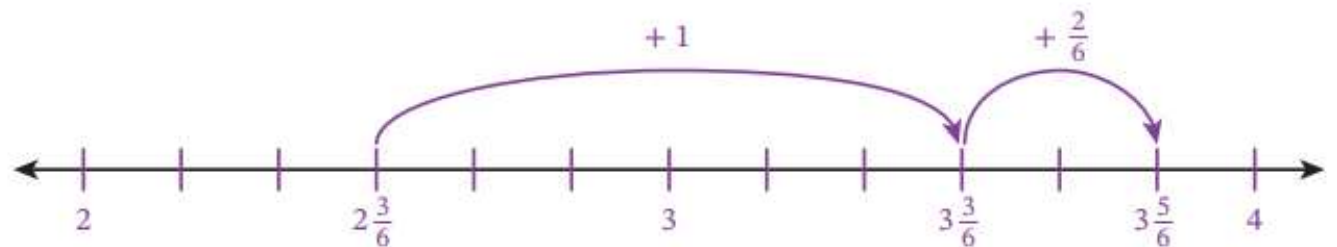
LEARN BOOK – PAGE 99

Make LIKE units. Then represent the equation with like units on the number line and add.

$$2\frac{1}{2} + 1\frac{1}{3} = 2\frac{\boxed{3}}{\boxed{6}} + 1\frac{\boxed{2}}{\boxed{6}} = \underline{3\frac{5}{6}}$$

$$\frac{1}{2} = \frac{1 \times \boxed{3}}{2 \times \boxed{3}} = \frac{\boxed{3}}{\boxed{6}}$$

$$\frac{1}{3} = \frac{1 \times \boxed{2}}{3 \times \boxed{2}} = \frac{\boxed{2}}{\boxed{6}}$$



LEARN (35-min)

Mixed Number Addition and Application

LEARN BOOK – PAGE 100

Make LIKE units. Then represent the equation with like units on the number line and add.

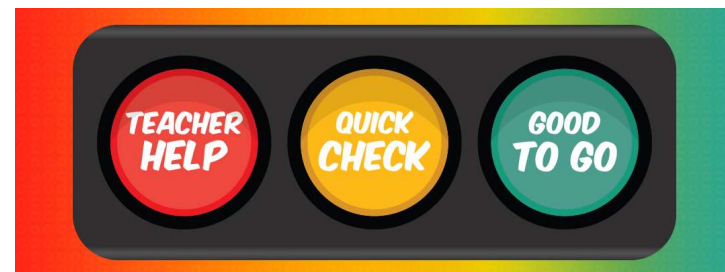
$$1\frac{3}{4} + 3\frac{2}{3} = 1\frac{\boxed{9}}{\boxed{12}} + 3\frac{\boxed{8}}{\boxed{12}} = \underline{4\frac{17}{12}} \quad 5\frac{5}{12}$$

$$\frac{3}{4} = \frac{3 \times \boxed{3}}{4 \times \boxed{3}} = \frac{\boxed{9}}{\boxed{12}}$$

$$\frac{2}{3} = \frac{2 \times \boxed{4}}{3 \times \boxed{4}} = \frac{\boxed{8}}{\boxed{12}}$$

LAND (10-min)

Exit Ticket



Add. Show your work.

1. $1\frac{1}{4} + 1\frac{4}{5} =$ _____

2. $4\frac{3}{4} + 12\frac{2}{3} =$ _____

Exit Ticket – PAGE 103

Small Group Time:

Problem Set Pages 99 - 102

Homework:

Page 75 APPLY BOOK