Do Now:

1.) $\frac{10}{25} = \frac{?}{5}$

2.) $\frac{7}{10} = \frac{?}{30}$

3.) $\frac{5}{8} = \frac{?}{16}$

Do Now:

1. Describe and correct the error.

$$\frac{3}{4} + \frac{3}{4} = \frac{3+3}{4+4} = \frac{6}{8} = \frac{3}{4}$$

Can't add

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

2. Monday morning, the pile of leaves was $11\frac{1}{4}$ inches high. Tuesday morning, the pile was $7\frac{3}{4}$ inches high. By how many inches did the pile change?

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

5.2 Fractions with Different Denominators

7.NS
7.EE

- SWBAT add and subtract fractions with different denominators.
- SWBAT understand numbers; compute fluently.
- Calculators: No

Adding and Subtracting Fractions

To add or subtract fractions:

1) Denominators must be the same
-If not the same, find the LCD

2) Add or subtract the numerators

(Keep denominators the same)

Find the sum or difference. Then simplify (Reduce) if possible.

a.) $\frac{5\cdot7}{5\cdot8}+\frac{2\cdot8}{5\cdot8}$ LCD: 40

5 = 5, 10, 15, 20, 25, 30, 35, 40, 45

8 = 8, 16, 24, 32, 40, 48, ...

$\frac{35}{40}+\frac{16}{40}=\frac{35+16}{40}=\frac{51}{40}=1\frac{11}{40}$

b.) $\frac{3\cdot3}{3\cdot10}-\frac{5\cdot5}{6\cdot5}$ LCD: 30

$\frac{9}{30}-\frac{25}{30}=\frac{9-25}{30}=\frac{-16\div2}{30\div2}=\frac{-8}{15}$

$\frac{6\cdot3}{6\cdot10}-\frac{5\cdot10}{6\cdot10}$

$\frac{18}{60}-\frac{50}{60}=\frac{18-50}{60}=\frac{-32\div4}{60\div4}=\frac{-8}{15}$

Find the sum or difference. Then simplify if possible.

a.) $-\frac{4}{7}-\frac{1}{2}=\frac{-15}{14}$

b.) $\frac{1}{6}-\frac{3}{8}=\frac{-5}{24}$

Find the sum or difference. Then simplify if possible.

a.) $\frac{6\cdot2x}{6\cdot5}-\frac{x\cdot5}{6\cdot5}$

$\frac{12x}{30}-\frac{5x}{30}=\frac{12x-5x}{30}=\frac{7x}{30}$

b.) $\frac{8 \cdot 5}{8 \cdot y} + \frac{7 \cdot y}{8 \cdot y}$

$\frac{40}{8y} + \frac{7y}{8y} = \frac{40+7y}{8y}$

Not like terms

Find the sum or difference. Then simplify if possible.

a.) $\frac{5d}{8} - \frac{2d}{5} = \frac{9d}{40}$

b.) $-\frac{10}{x} + \frac{3}{4} = \frac{-40+3x}{4x}$

On Monday, Jaquaan's plant was $2\frac{3}{4}$ inches long. By Friday, it was $8\frac{1}{8}$ inches long.

How much did the plant grow?

$8\frac{1}{8} = \frac{65}{8}$ $2\frac{3}{4} = \frac{11}{4}$

$\frac{43}{8}$ $8\overline{)43}$

$\frac{65}{8} - \frac{11 \cdot 2}{4 \cdot 2}$

$\frac{65}{8} - \frac{22}{8} = \frac{65-22}{8} = \frac{43}{8}$

$8\overline{)43}$ quotient 5, -40, remainder 3

Denominator (8), Whole # (5), Numerator (3)

$\frac{43}{8} = 5\frac{3}{8}$ inches

Jaquaan's plant grew $5\frac{3}{8}$ inches.

Solve the equation. For 2 Dojo Points

$7\frac{7}{6} - 6\frac{5}{9} - y = \frac{1}{3}$

Exit Pass 5.2

Explain the process for adding or subtracting two fractions with:

a. common denominators

b. different denominators

"Don't blame the sea if you cannot catch a fish."

Working individually or with a partner, complete the workbook.

Workbook pg.

Reflections of Today's Lesson

5.2 Fractions with Different Denominators

7.NS
7.EE

- SWBAT add and subtract fractions with different denominators.
- SWBAT understand numbers; compute fluently.

- Calculators: No

Homework

pg. 227 #7-23 odds, 24-27 all, 30, 32

* Test corrections due Thurs.
(Must be signed)