Convert the following fraction to decimal and to percent.

a) $\frac{247}{100} = 2\frac{47}{100}$ (Mixed)

$= 247\%$

$= 2.47$

b) $\frac{7}{25} \overset{\times 4}{=} \frac{28}{100}$

$= 28\%$

$= 0.28$

c) $\frac{7}{10} \overset{\times 10}{=} \frac{70}{100}$

70%

$= 0.7$

0.70

Adding & Subtracting Fraction

same denominators

-When adding fractions WITH COMMON denominators, just add the numerators (leave the denominator the same) ....ALWAYS REDUCE solution

$\frac{5}{12} + \frac{3}{12} = \frac{8}{12}$ Reduce $\frac{4}{6} = \frac{2}{3}$

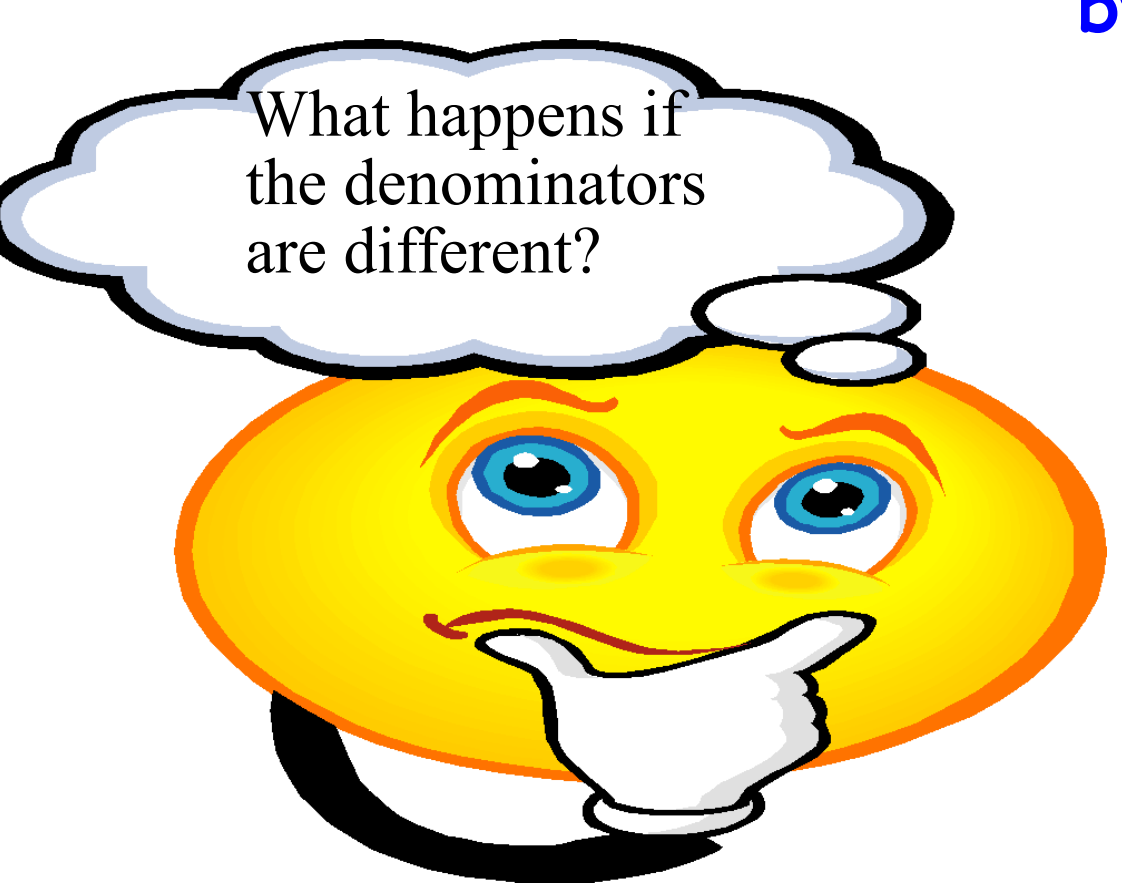
-When subtracting fractions WITH COMMON denominators, just subtract the numerators (leave the denominator the same) ....ALWAYS REDUCE solution

$\frac{19}{21} - \frac{9}{21} = \frac{10}{24} = \frac{5}{12}$

Adding & Subtracting Fraction

DIFFERENT denominators

You can add or subtract fraction with different denominators as long as you find equivalent fractions with the same denominators first. Then simply add (or subtract) the numerators and the denominators will stay the same.*Find common denominators



Find a Common Denominator
by determining the LCM.

L

C ommon

M ultiple

$$\frac{3}{4}\ \overset{\times 3}{} + \frac{5}{6}\ \overset{\times 2}{}$$

To Add or Subtract
→ Denominators must be same.
Find the LCM first!

Multiples of 4 and 6:

4 : 4, 8, 12, 16, 20, 24 ...

6 : 6, 12, 18, 24 ...

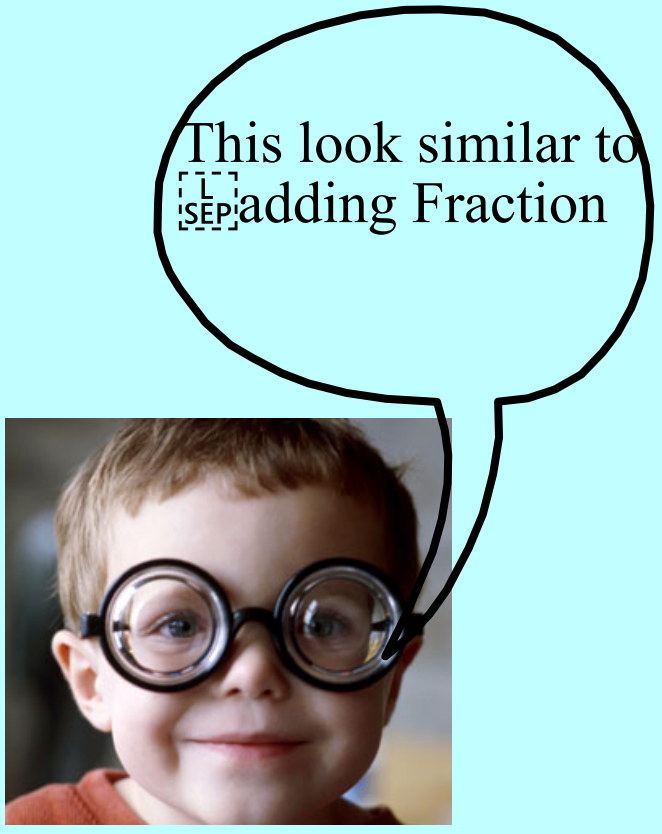
$$= \frac{9}{12} + \frac{10}{12}$$

$$= \frac{19}{12}$$

$$= 1\frac{7}{12}$$

When subtracting fractions you must have a ...

Common Denominator



Ex) $\frac{13}{7} - \frac{4}{7} =$

Same Denominators

Oh, what to do when the denominators are different???

I Know this one!!!!

When denominators are different you have to find a **"common denominator"**

Ho

By determining the LCM

Lowest Common Multiple

(of the denominators)

Subtract the following rational numbers

$3 \cdot \frac{13}{7} - \frac{4}{3}$ ×7 ×7

$\frac{39}{21} - \frac{28}{21}$

$= \frac{11}{21}$

Look at the multiples of each denominator

Find the LCM

7

1 x 7 = 7

2 x 7 = 14

3 x 7 = 21

4 x 7 = 28

3

1 x 3 = 3

2 x 3 = 6

3 x 3 = 9

4 x 3 = 12

5 x 3 = 15

6 x 3 = 18

7 x 3 = 21

Thus the LCM is

Your Turn

1) $\frac{17}{12} - \frac{4}{9}$ (×3, ×4)

$\frac{51}{36} - \frac{16}{36}$

$= \frac{35}{36}$

2) $\frac{2}{7} - \frac{5}{28}$ (×4)

$= \frac{8}{28} - \frac{5}{28}$

$= \frac{3}{28}$

You try

No modelling

a) $\frac{2}{3\times 3} + \frac{4}{9}$

$\frac{6}{9} + \frac{4}{9} = \frac{10}{9} = 1\frac{1}{9}$

10, 20, 30, 40, 50
3, 6, 9, 12, 15, 16, 21, 24
27, 30

b) $\frac{5}{3\times 8} + \frac{1\times 4}{6\times 4}$

$\frac{15}{24} + \frac{4}{24}$

$\frac{19}{24}$

c) $\frac{9}{10} - \frac{2\times 10}{3\times 10}$

$\frac{27}{30} - \frac{20}{30}$

$\frac{7}{30}$

d) $\frac{2\times 2}{9\times 2} + \frac{5\times 3}{6\times 3}$

$\frac{4}{18} + \frac{15}{18}$

$\frac{19}{18} = 1\frac{1}{18}$

You try

No modelling

a) $\frac{2}{3} + \frac{4}{9}$

$\frac{6}{9} + \frac{4}{9} = \frac{10}{9}$

b) $\frac{5}{8} + \frac{1}{6}$

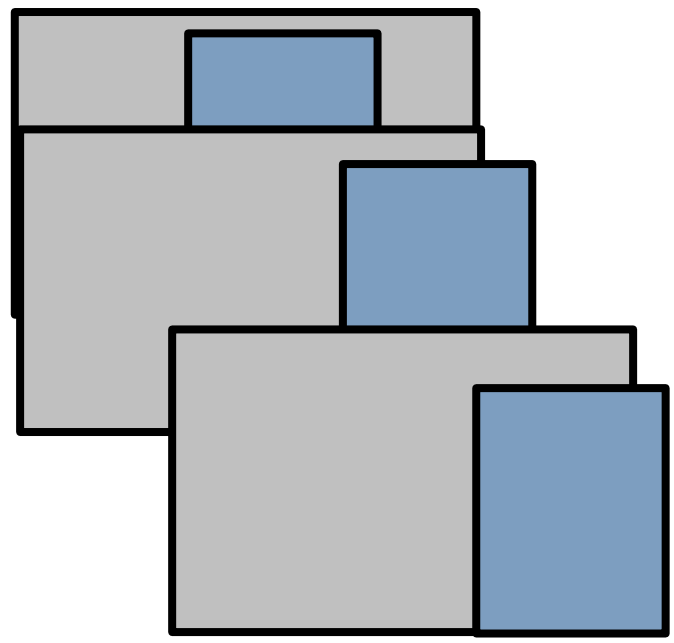
$\frac{15}{24} + \frac{4}{24} = \frac{19}{24}$

c) $\frac{9}{10} - \frac{2}{3}$

$\frac{27}{30} - \frac{20}{30} = \frac{7}{30}$

d) $\frac{2}{9} + \frac{5}{6}$

$\frac{4}{18} + \frac{15}{18} = \frac{19}{18}$



Homework

Sheet 151 #1-6

Draw #1 b, d, f, g

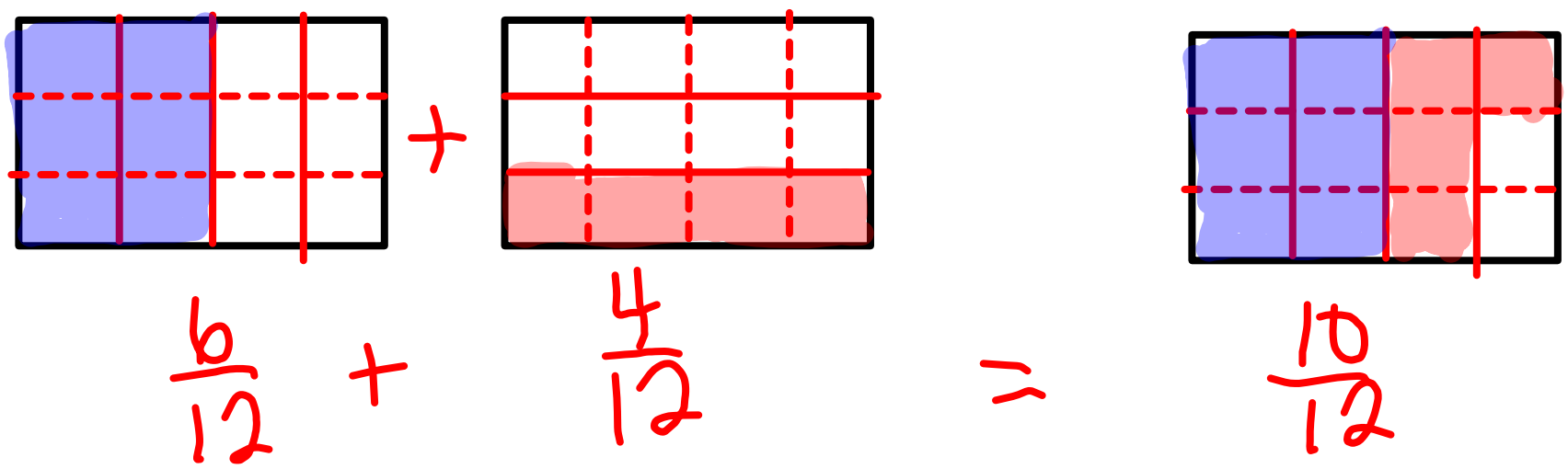
#2 b, d, g

Class/Homework

Sheet 151 # 1 to #6

(ONLY USE RULES NO MODELING)

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



$$\frac{6}{12} + \frac{4}{12} = \frac{10}{12}$$

Sheet-Daffy Definitions

1. $\frac{15}{2} = 7\frac{1}{2}$

2. $\frac{8}{3} = 2\frac{2}{3}$

3. $\frac{21}{5} = 4\frac{1}{5}$

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

5) $\frac{14}{3} = 4\frac{2}{3}$

6) $\frac{10}{2} = 5$

7) $\frac{22}{7} = 3\frac{1}{7}$

8) $\frac{36}{8} = 4\frac{9}{8} \sim 4\frac{1}{2}$

9) $\frac{13}{9} = 1\frac{4}{9}$

10) $\frac{22}{6} = 3\frac{4}{6}$ or $3\frac{2}{3}$

11) $\frac{72}{8} = 9$

12) $\frac{100}{60} = 2$

13) $\frac{43}{7} = 6\frac{1}{7}$

14) $\frac{34}{5} = 6\frac{4}{5}$

15) $\frac{33}{10} = 3\frac{3}{10}$

16) $\frac{22}{16} = 1\frac{6}{16}$ or $1\frac{3}{8}$

17) $\frac{42}{15} = 2\frac{12}{15}$ or $2\frac{4}{5}$

18) $\frac{31}{10} = 3\frac{1}{10}$