Subtracting Fractions With Re-Grouping NOTES

Making Improper Fractions	By Re-Grouping
Be very careful because sometimes the numbers you're working with get very large!! ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	**You need to understand that** $8\frac{1}{5} = 7 + 1\frac{1}{5} = 7\frac{6}{5}$ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~

Making Improper Fractions:

EX: $8\frac{1}{5} \rightarrow \frac{41}{5}$

$-3\frac{4}{5} \rightarrow \frac{19}{5}$

$\frac{22}{5} = 4\frac{2}{5}$

By Re-Grouping:

EX: $8\frac{1}{5} \rightarrow 7\frac{6}{5}$ *borrow from your whole #, give it back.*

$-3\frac{4}{5} \rightarrow 3\frac{4}{5}$ $7\frac{5}{5} + \frac{1}{5} = 7\frac{6}{5}$

$4\frac{2}{5}$ $-3\frac{4}{5}$

$\boxed{4\frac{2}{5}}$

Solve:

1) $4\frac{1}{8} = \frac{33}{8}$

$-2\frac{3}{8} = \frac{19}{8}$

$\frac{14}{8} = 1\frac{6}{8} = \boxed{1\frac{3}{4}}$

2) $5\frac{2}{9} = 4\frac{9}{9} + \frac{2}{9} = 4\frac{11}{9}$

$-4\frac{7}{9} \qquad -4\frac{7}{9}$

$\boxed{\frac{4}{9}}$

3) $6\frac{5}{6} \rightarrow 5\frac{6}{6}$

$-1\frac{5}{6}$

$\boxed{4\frac{1}{6}}$

Find common denominators!

4) $4\frac{1}{2} \rightarrow 4\frac{4}{8}$

$-3\frac{7}{8}$

$4\frac{4}{8} = 3\frac{8}{8} + \frac{4}{8} = 3\frac{12}{8}$

$-3\frac{7}{8} \qquad -3\frac{7}{8}$

$\boxed{\frac{5}{8}}$

5) $9\frac{1}{3} = 9\frac{2}{6} = 8\frac{6}{6} + \frac{2}{6} = 8\frac{8}{6}$

$-3\frac{5}{6} \qquad -3\frac{5}{6}$

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

6) $7\frac{1}{4} = 7\frac{3}{12} = 6\frac{12}{12} + \frac{3}{12} = 6\frac{15}{12}$

$-2\frac{1}{3} = 2\frac{4}{12} \qquad -2\frac{4}{12}$

$\boxed{4\frac{11}{12}}$

Adding and Subtracting with Re-Grouping

7) While Audrey was sunbathing in her backyard, she listened to two playlists on her i-pod. The first playlist was $1\frac{1}{2}$ hours, the second playlist played for $\frac{3}{4}$ hour. How long did the music play in all?

8) Two Boy Scouts were walking along a trail in the mountains. On the first day they walked $9\frac{5}{8}$ kilometers. On the second day they walked $12\frac{1}{3}$ kilometers. How much further did they walk on the second day than the first?

9) What is the range of the heights?

Student	Tom	Elizabeth	Jim	Michael	Jessica
Height (in feet)	$6\frac{1}{3}$	$5\frac{3}{4}$	$6\frac{1}{2}$	$5\frac{7}{12}$	$5\frac{5}{6}$

10) A recipe for Chex mix calls for $2\frac{1}{4}$ cups of Chex, $2\frac{1}{2}$ cups of Cheerios and $\frac{2}{3}$ cups of pretzels. What is the total amount of these ingredients?