Name Key Period _____

4.5 Guided Notes (Add and Subtract Mixed Numbers)

Key Concept:

- To add or subtract mixed numbers:
  - Rewrite with the LCD.
  - Add or subtract the fractions.
    - ***Subtraction Exception****: Sometimes we must rename a fraction to subtract (borrow from the whole number)!*
  - Add or subtract the whole numbers.
  - Simplify if necessary.

Practice:

1. $7\frac{4}{9}+10\frac{2}{9}$

$$7\tfrac{4}{9}+10\tfrac{2}{9}=17\tfrac{6}{9}=\boxed{17\tfrac{2}{3}}$$

2. $8\frac{5}{6}-2\frac{1}{3}$

$$8\tfrac{5}{6}-2\tfrac{2}{6}=6\tfrac{3}{6}=\boxed{6\tfrac{1}{2}}$$

3. $6\frac{1}{8}+2\frac{5}{8}$ $8\frac{3}{4}$

4. $5\frac{1}{5}+2\frac{3}{10}$ $7\frac{1}{2}$

5. $1\frac{5}{9}+4\frac{1}{6}$ $5\frac{13}{18}$

6. $5\frac{4}{5}-1\frac{3}{10}$ $4\frac{1}{2}$

Additional Practice:

7. $13\frac{7}{8} - 9\frac{3}{4}$ $4\frac{1}{8}$

8. $8\frac{2}{3} - 2\frac{1}{2}$ $6\frac{1}{6}$

9. $7 - 1\frac{1}{2}$ $5\frac{1}{2}$

10. $11\frac{2}{5} - 2\frac{3}{5}$ $8\frac{4}{5}$

11. $8 - 3\frac{3}{4}$ $4\frac{1}{4}$

12. $3\frac{1}{4} - 1\frac{3}{4}$ $1\frac{1}{2}$

13. An urban planner is designing a skateboard park. The length of the skateboard park is $120\frac{1}{2}$ feet. The length of the park lot is $40\frac{1}{3}$ feet. What will be the length of the park and the parking lot combined?

$$\begin{array}{r} 120\frac{1}{2} \\ +\ 40\frac{1}{3} \end{array} \Rightarrow \begin{array}{r} 120\frac{3}{6} \\ +\ 40\frac{2}{6} \\ \hline 160\frac{5}{6}\text{ ft} \end{array}$$