

Chapter 6

Addition and Subtraction of Fractions

6.5 Subtracting Mixed Numbers by Renaming

Pages 316-321

NOTES (6 .5 Subtracting Mixed Number by Renaming)

Key Concept p. 316

At times, we must borrow in order to subtract

Guided Practice pp. 318-319

Do # 2 & 4 like this

$$1) 2\frac{1}{6} = 1\boxed{7}\frac{1}{6}$$

$$2\frac{1}{6} = 1 + \frac{6}{6} + \frac{1}{6} = 1\frac{7}{6}$$

$$3) 5\frac{1}{3} = \boxed{4}\frac{4}{3}$$

$$5\frac{1}{3} = 4\frac{3}{3} + \frac{1}{3} = 4\frac{4}{3}$$

#6 = 2 pts

Do # 8-18 even like this

$$7) 4 \frac{1}{4} - 2 \frac{5}{6} = \left(1 \frac{1}{3} \right)$$

$$\begin{array}{r} 3 \\ \cancel{4} \frac{1}{6} \end{array} \quad 3 \frac{7}{6}$$

$$\begin{array}{r} - 2 \frac{5}{6} \\ \hline - 2 \frac{5}{6} \\ \hline 1 \frac{2}{6} = 1 \frac{1}{3} \end{array}$$

$$15) 4 \frac{2}{3} - 1 \frac{7}{8} = \left(2 \frac{19}{24} \right)$$

$\begin{array}{r} 4 \frac{2}{3} \\ \downarrow +3 \\ 4 \frac{16}{24} \end{array} \quad \begin{array}{r} - 1 \frac{7}{8} \\ \downarrow +3 \\ - 1 \frac{21}{24} \end{array}$

$$3 \frac{16}{24} + \frac{24}{24} = 3 \frac{40}{24}$$

$$\begin{array}{r} - 1 \frac{21}{24} \\ \hline 2 \frac{19}{24} \end{array}$$

Do # 38 & 40 like this

Solve from left to right, and reduce, if necessary

$$39) 8\frac{1}{3} - y + x = 5\frac{47}{60}$$

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

$$8\frac{12}{60} - 6\frac{15}{60} + 3\frac{50}{60}$$

$$8 - 6 + 3 = 5$$

$$\frac{12 + 50 - 15}{60} = \frac{62 + 5}{60} = \frac{47}{60}$$

$$2 \overline{) \begin{array}{r} 5 \ 4 \ 6 \\ 5 \ 2 \ 3 \end{array}}$$

$$2 \times 5 \times 2 \times 3 = \\ 60 = \text{LCD}$$

combine like terms

$$43) 7 - (y - x) = 4\frac{7}{12}$$

$$7 - (6\frac{1}{4} - 3\frac{5}{6})$$

$$7 - (6\frac{3}{12} - 3\frac{10}{12}) = 7 - (5\frac{15}{12} - 3\frac{10}{12})$$

$$7 - 2\frac{5}{12} = 6\frac{12}{12} - 2\frac{5}{12}$$

$$6 - 2 = 4 \text{ and } \frac{12-5}{12} = \frac{7}{12}$$

#52 = 2 pts