Homework 1.3

A. Wakefield

69: $\frac{9}{17} + \frac{2}{34} = \frac{18}{34} + \frac{2}{34} = \frac{20}{34} = \boxed{\frac{10}{17}}$

$2\overline{)20}\ \ 10 \qquad 2\overline{)34}\ \ 17 \qquad \frac{10}{17}$

79: $9\frac{2}{5} - 6\frac{1}{2} = 47/5 \mp 13/2 = \frac{94}{10} - \frac{65}{10} = \frac{29}{10} = \boxed{2\frac{9}{10}}$

87: A: $3/4 + 2/3 = 9/12 + 8/12 = 17/12 = \boxed{1\frac{5}{12}}$

B: $3/4 - 2/3 = 9/12 - 8/12 = \boxed{1/12}$

C: $3/4 \cdot 2/3 = 6/12 = \boxed{1/2}$

D: $3/4 \div 2/3 = \frac{3 \cdot 3}{4 \cdot 2} = \frac{9}{8} = \boxed{1\frac{1}{8}}$

88: A: $5/6 \div 3/8 = \frac{5 \cdot 8}{6 \cdot 3} = \frac{40}{18} = \frac{20}{9} = \boxed{2\frac{2}{9}}$

B: $5/6 + 3/8 = \frac{20}{24} + \frac{12}{24} = \frac{32}{24} = 3/4 = \boxed{1\frac{1}{3}}$

C: $5/6 - 3/8 = \frac{20}{24} - \frac{12}{24} = \frac{8}{24} = \boxed{1/3}$

D: $5/6 \cdot 3/8$

$= \frac{5 \cdot 3}{6 \cdot 8} = \frac{15}{48} = \boxed{5/16}$

89: A: $2\frac{5}{6} - 1\frac{2}{3} = 17/6 \cdot 5/3 = \frac{17 \cdot 5}{6 \cdot 3} = \frac{85}{18} = \boxed{4\frac{13}{18}}$

B: $2\frac{5}{6} + 1\frac{2}{3} = 17/6 + 5/3 = 17/6 + 10/6 = 27/6 = 4\frac{3}{6} = \boxed{4\frac{1}{2}}$

C: $2\frac{5}{6} \div 1\frac{2}{3} = 17/6 \div 5/3 = \frac{17 \cdot 3}{6 \cdot 5} = \frac{51}{30} = 1\frac{21}{30} = \boxed{1\frac{7}{10}}$

D: $2\frac{5}{6} - 1\frac{2}{3} = 17/6 - 5/3 = 17/6 - 10/6 = 7/6 = \boxed{1\frac{1}{6}}$

109: $\frac{97}{154}$ $154 - 97 = 57$ $\boxed{\frac{57}{154}}$