

10-11-17

Aim: SWBAT solve word problems with fractions and mixed numbers.

HW: Finish Word Problems

Quiz tomorrow (+/- F and MN)

Do Now: Check hw

Pg. 245 # 3-13 odd

$$\textcircled{3} \quad \frac{-3\cancel{4}}{4} \cdot \frac{5}{\cancel{10}_2} = \frac{-15}{8}$$

$$\textcircled{5} \quad \frac{\cancel{24}}{5} \cdot \frac{3}{\cancel{10}_5} = \frac{6}{25}$$

$$\textcircled{7} \quad \frac{-5}{6} \cdot \frac{5}{12} = \frac{-25}{72}$$



$$\textcircled{9} \quad \frac{\cancel{3}^3}{\cancel{12}_2} \cdot \frac{3}{\cancel{8}_2} = \frac{9}{2}$$

$$\textcircled{11} \quad 6 \frac{3}{16} \cdot (-3 \frac{1}{5})$$

$$\frac{99}{16} \cdot \frac{-16}{5} = \frac{-99}{5}$$

$$\textcircled{13} \quad 5 \frac{2}{3} \cdot (-6)$$

$$\frac{17}{3} \cdot \frac{-6^2}{1} = \frac{-34}{1}$$

$$= -34$$

Pg. 250 # 25-35 odd

$$\textcircled{25} \quad 12 \frac{1}{7} \div 5 \frac{5}{6}$$

$$\frac{85}{7} \div \frac{35}{6}$$

KCF

$$\frac{\cancel{85}^{17}}{7} \cdot \frac{6}{\cancel{35}_7}$$

$$\frac{102}{49}$$

$$\textcircled{27} \quad -22 \frac{2}{3} \div 3 \frac{1}{5}$$

$$\frac{-68}{3} \div \frac{16}{5}$$

$$\frac{-68}{3} \cdot \frac{5}{\cancel{16}_4}$$

$$\frac{-85}{12}$$

$$\textcircled{29} \quad 8 \frac{4}{13} \div 6 \frac{3}{4}$$

$$\frac{108}{13} \div \frac{27}{4}$$

$$\frac{4 \cdot \cancel{108}}{13} = \frac{4}{\cancel{27}_9}$$

$$\frac{16}{13}$$

$$\textcircled{31} \quad 15 \div 4 \frac{1}{6}$$

$$\frac{15}{1} \div \frac{25}{6}$$

$$\frac{\cancel{15}^3}{1} \cdot \frac{6}{\cancel{25}_5}$$

$$\frac{18}{5}$$

$$\textcircled{33} \quad 6 \frac{4}{7} \div (-4)$$

$$\frac{46}{7} \div \frac{-4}{1}$$

$$\frac{\cancel{46}^{23}}{7} \cdot \frac{-1}{\cancel{4}_2}$$

$$\frac{-23}{14}$$

$$\textcircled{35} \quad -9 \frac{5}{6} \div 1 \frac{2}{3}$$

$$\frac{-59}{6} \div \frac{5}{3}$$

$$\frac{-59}{\cancel{2}_6} \cdot \frac{\cancel{3}^1}{5}$$

$$\frac{-59}{10}$$

Extra Practice Answer Key

$$\textcircled{1} \quad \boxed{\frac{4}{5} + (-\frac{7}{5})}$$

$$\frac{4}{5} - \frac{7}{5}$$

$$\boxed{\frac{-3}{5}}$$

$$\textcircled{2} \quad \boxed{-\frac{5}{4} + (-\frac{7}{4})}$$

$$-\frac{5}{4} - \frac{7}{4}$$

$$\frac{-12}{4}$$

$$\boxed{-3}$$

$$\textcircled{3} \quad \boxed{-\frac{5}{8} + \frac{1}{6}}$$

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

$$\boxed{\frac{-11}{24}}$$

$$\textcircled{4} \quad \boxed{-\frac{1}{2} + (-\frac{3}{4})}$$

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

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

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

$$\textcircled{5} \quad \boxed{4\frac{1}{2} + (-3\frac{2}{3})}$$

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

$$\frac{9}{2} - \frac{11}{3}$$

$$\frac{27}{6} - \frac{22}{6}$$

$$\boxed{\frac{5}{6}}$$

$$\textcircled{6} \quad \boxed{-5\frac{2}{3} + (-8\frac{1}{2})}$$

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

$$-\frac{17}{3} - \frac{17}{2}$$

$$-\frac{34}{6} - \frac{51}{6}$$

$$\boxed{\frac{-85}{6}}$$

$$\textcircled{7} \quad -10 + 7\frac{1}{3}$$

$$\boxed{-\frac{10}{1} + \frac{22}{3}}$$

$$\frac{-30}{3} + \frac{22}{3}$$

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

$$\textcircled{8} \quad \boxed{-1\frac{2}{7} + (-5\frac{3}{14})}$$

$$-1\frac{2}{7} - 5\frac{3}{14}$$

$$-\frac{9}{7} - \frac{73}{14}$$

$$-\frac{18}{14} - \frac{73}{14}$$

$$-\frac{91}{14} \div \frac{7}{7} = \boxed{\frac{-13}{2}}$$

$$\textcircled{9} \quad \boxed{9\frac{5}{6} + (-8\frac{3}{4})}$$

$$9\frac{5}{6} - 8\frac{3}{4}$$

$$\frac{59}{6} - \frac{35}{4}$$

$$\frac{118}{12} - \frac{105}{12}$$

$$\boxed{\frac{13}{12}}$$

$$\textcircled{10} \quad -\frac{5}{8} + \frac{7}{24}$$

$$\boxed{\frac{-15}{24} + \frac{7}{24}}$$

$$\frac{-8}{24} \div \frac{8}{8} = \boxed{\frac{-1}{3}}$$

$$\textcircled{11} \quad \boxed{-6\frac{1}{2} + (-4\frac{2}{3})}$$

$$-6\frac{1}{2} - 4\frac{2}{3}$$

$$-\frac{13}{2} - \frac{14}{3}$$

$$-\frac{39}{6} - \frac{28}{6}$$

$$\boxed{\frac{-67}{6}}$$

$$\textcircled{12} \quad \boxed{-1\frac{3}{11} + (-5\frac{4}{5})}$$

$$-1\frac{3}{11} - 5\frac{4}{5}$$

$$-\frac{14}{11} - \frac{29}{5}$$

$$-\frac{70}{55} - \frac{319}{55}$$

$$\boxed{\frac{-389}{55}}$$

$$\begin{array}{r} 29 \\ \times 11 \\ \hline 29 \\ + 29 \\ \hline 219 \end{array}$$

$$\textcircled{13} \quad \boxed{-16\frac{3}{4} + 8\frac{4}{5}}$$

$$-\frac{67}{4} + \frac{44}{5}$$

$$-\frac{335}{20} + \frac{176}{20}$$

$$\boxed{\frac{-159}{20}}$$

$$\begin{array}{r} 212 \\ 335 \\ - 176 \\ \hline 159 \end{array}$$

14 $-5\frac{2}{3} + (-1\frac{1}{9})$
 $-5\frac{2}{3} - 1\frac{1}{9}$
 $\frac{-17}{3} - \frac{10}{9}$
 $\frac{-51}{9} - \frac{10}{9}$
 $\frac{-61}{9}$

15 $8\frac{7}{9} + 6\frac{1}{5}$
 $\frac{79}{9} + \frac{31}{5}$
 $\frac{395}{45} + \frac{279}{45}$
 $\frac{674}{45}$

16 $-21\frac{4}{7} + 8\frac{11}{21}$
 $-\frac{151}{7} + \frac{179}{21}$
 $-\frac{453}{21} + \frac{179}{21}$
 $\frac{-274}{21}$

$\frac{314}{21}$
 $\frac{-179}{21}$
 $\frac{274}{21}$

17 $52\frac{12}{17} + (-15\frac{8}{34})$
 $52\frac{12}{17} - 15\frac{8}{34}$
 $52\frac{12}{17} = 52\frac{24}{34}$
 $52\frac{24}{34} - 15\frac{8}{34}$
 $37\frac{16}{34} = 37\frac{8}{17}$

18 $-4\frac{3}{4} + 6\frac{5}{8} + (-4\frac{1}{16})$
 $-\frac{19}{4} + \frac{53}{8} + (-\frac{65}{16})$
 $-\frac{76}{16} + \frac{106}{16} + (-\frac{65}{16})$
 $\frac{-35}{16}$

24 $5 - 2\frac{1}{3}$
 $\frac{5}{1} - \frac{7}{3}$
 $\frac{15}{3} - \frac{7}{3}$
 $\frac{8}{3}$

25 $-5\frac{2}{3} - 8$
 $-\frac{17}{3} - \frac{8}{1}$
 $-\frac{17}{3} - \frac{24}{3}$
 $\frac{-41}{3}$

26 $-9\frac{1}{3} - (6\frac{2}{3})$
 $-\frac{28}{3} - \frac{20}{3}$
 $-\frac{48}{3}$
 -16

(27) $-11\frac{1}{2} - (-16\frac{1}{2})$
 $-11\frac{1}{2} + 16\frac{1}{2}$
 $\frac{-23}{2} + \frac{33}{2}$
 $\frac{10}{2}$
 (5)

(28) $-4\frac{1}{5} - (-8\frac{7}{10})$
 $-\frac{21}{5} + \frac{37}{10}$
 $-\frac{42}{10} + \frac{37}{10}$
 $\frac{-5}{10} \div \frac{5}{5}$
 $-\frac{1}{2}$

(29) $8\frac{2}{5} - 3\frac{1}{2}$
 $\frac{42}{5} - \frac{7}{2}$
 $\frac{84}{10} - \frac{35}{10}$
 $\frac{49}{10}$

(30) $7\frac{1}{3} - (-3\frac{3}{4})$
 $7\frac{1}{3} + 3\frac{3}{4}$
 $\frac{36}{5} + \frac{15}{4}$
 $\frac{144}{20} + \frac{75}{20}$
 $\frac{219}{20}$

(31) $3\frac{1}{7} - 8\frac{5}{6}$
 $\frac{22}{7} - \frac{53}{6}$
 $\frac{132}{42} - \frac{371}{42}$
 $\frac{-239}{42}$
 $\frac{371}{-132}$
 $\frac{239}{42}$

(32) $-12\frac{5}{8} - (-3\frac{1}{4})$
 $-\frac{101}{8} + \frac{13}{4}$
 $-\frac{101}{8} + \frac{26}{8}$
 $\frac{-75}{8}$

Word Problems

- Improper fractions should be converted to mixed #s.
- Final answer in a written sentence.

Pg. 236 - 237 # 41 - 43, 46

Pg. 246 # 33, 34

Pg. 241 - 242 # 37, 38, 40

Pg. 251 # 53, 55, 56

Pg. 253 # 13 - 14

Pg. 236

$$\begin{array}{r}
 \text{\# 41} \quad 21\frac{3}{8} - 2\frac{5}{8} \\
 \quad \quad \quad 1 = \frac{8}{8} \\
 \quad \quad \quad 21\frac{3}{8} = 20\frac{11}{8} \\
 \quad \quad \quad - 2\frac{5}{8} = - 2\frac{5}{8} \\
 \hline
 \quad \quad \quad 18\frac{6}{8} \div 2 \\
 \quad \quad \quad 18\frac{3}{4}
 \end{array}$$

vs.

$$\begin{array}{r}
 \text{\textcircled{41}} \quad 21\frac{3}{8} - 2\frac{5}{8} \\
 \quad \quad \quad \frac{171}{8} - \frac{21}{8} \\
 \quad \quad \quad \frac{150}{8} \cdot \quad \quad \quad \begin{array}{r} 18 \\ 8 \overline{)150} \\ \underline{-84} \\ 70 \\ \underline{-64} \\ 6 \end{array} \\
 \quad \quad \quad 18\frac{3}{4}
 \end{array}$$

There are $18\frac{3}{4}$ inches of scarf left.

$$\begin{array}{r}
 \text{\textcircled{46}} \quad 6\frac{1}{6} + 8\frac{5}{6} + 5\frac{1}{6} \quad 25 - 20\frac{1}{6} \\
 \quad \quad \quad 19\frac{7}{6} \quad \quad \quad \frac{25}{1} - 20\frac{1}{6} \\
 \quad \quad \quad 20\frac{1}{6} \quad \quad \quad \frac{150}{6} - \frac{121}{6} \\
 \quad \quad \quad \quad \quad \quad \frac{29}{6} \\
 \quad \quad \quad \quad \quad \quad 4\frac{5}{6}
 \end{array}$$

I need to volunteer $4\frac{5}{6}$ hours during the last week.

Pg. 241 #37

$$47\frac{1}{4} - 31\frac{1}{2}$$

$$\begin{array}{r} 47\frac{1}{4} = \cancel{47}\frac{1}{4} = 46\frac{5}{4} \\ - 31\frac{1 \times 2}{2 \times 2} = 31\frac{2}{4} \\ \hline 15\frac{3}{4} \end{array}$$

vs.

37. $47\frac{1}{4} - 31\frac{1}{2}$

$$\frac{189}{4} - \frac{63}{2}$$

$$\frac{189}{4} - \frac{126}{4}$$

$$\frac{63}{4}$$

$$15\frac{3}{4}$$

$$4\sqrt{63}$$

The difference is $15\frac{3}{4}$ inches.