Review questions

1. $\frac{4}{3} - \frac{11}{6}$

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

3. $\frac{9}{10} \div \left(-\frac{3}{2}\right)$

4. $1\frac{3}{5} \times \left(-2\frac{1}{2}\right)$

5. $-\frac{4}{5} \div \left(\frac{1}{2} + \left(-\frac{1}{6}\right)\left(-\frac{1}{6}\right) \times \frac{1}{4}\right)$

solutions...

1. $\frac{4}{3} - \frac{11}{6} = \frac{8}{6} - \frac{11}{6}$

$= -\frac{3}{6}$

$= -\frac{1}{2}$

2. $-4\frac{1}{7} + \left(-1\frac{3}{5}\right) = -\frac{29}{7} - \frac{8}{5}$

$\times 5 \qquad \times 7$

$= -\frac{145}{35} - \frac{56}{35}$

$= -\frac{201}{35}$

$= -5\frac{26}{35}$

(3.) $\frac{9}{10} \div \left(-\frac{3}{2}\right) = \frac{\cancel{9}^{3}}{\cancel{10}_{5}} \times -\frac{2}{\cancel{3}_{1}}^{1}$

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

$-\frac{18}{30} \div 6$

$-\frac{3}{5}$

(4.) $1\frac{3}{5} \times \left(-2\frac{1}{2}\right) = \frac{\cancel{8}^{4}}{\cancel{5}_{1}} \times -\frac{\cancel{5}^{1}}{\cancel{2}_{1}}$ or $\rightarrow -\frac{40}{10}$

$= -4$

-4

5. $-\frac{4}{5} \div \left(\frac{1}{2} + \left(-\frac{1}{6}\right)\left(-\frac{1}{6}\right) \times \frac{1}{4}\right)$

$-\frac{4}{5} \div \left(\frac{1}{2} + \frac{1}{144}\right)$

$-\frac{4}{5} \div \left(\overset{(\times 72)}{\frac{72}{144}} + \frac{1}{144}\right)$

$-\frac{4}{5} \times \frac{144}{73}$

$= -\frac{576}{365}$

$= -1\ \frac{211}{365}$

Worksheet #2

$\left(-\frac{1}{2}\right)^3 \times \left(\left(-\frac{2}{3}\right) \div \left(-\frac{5}{6}\right) - \frac{1}{2}\right)$

$\left(-\frac{1}{2}\right)^3 \times \left(-\frac{2}{3} \times -\frac{6}{5} - \frac{1}{2}\right)$

$\left(-\frac{1}{2}\right)^3 \times \left(\frac{12}{15} - \frac{1}{2}\right)$

$\left(-\frac{1}{2}\right)^3 \times \left(\frac{24}{30} - \frac{15}{30}\right)$

$= \left(-\frac{1}{2}\right)^3 \times \frac{9}{30}$

$= -\frac{1}{8} \times \frac{9}{30}$

$= -\frac{9}{240}$

$= -\frac{3}{80}$

$\left(\frac{2}{3}\right)^2 \times \left(\frac{5}{6} \div \frac{2}{5} - \frac{1}{4}\right)$

$\frac{4}{9} \times \left(\frac{5}{6} \times \frac{5}{2} - \frac{1}{4}\right)$ $\times 3$

$\frac{4}{9} \times \left(\frac{25}{12} - \frac{3}{12}\right)$

$\frac{4}{9} \times \frac{22}{12}$ (1, 3)

$= \frac{22}{27}$

$$\left(\left(-\frac{3}{5}\right)\times\left(\frac{1}{2}\right)^2\right)\div\left(\left(-\frac{1}{8}\right)+\frac{3}{5}\right)$$

$$=\left(-\frac{3}{5}\times\frac{1}{4}\right)\div\left(-\frac{1}{8}+\frac{3}{5}\right)$$

$$=-\frac{3}{20}\div\left(\frac{-5}{40}+\frac{24}{40}\right)$$

$$=-\frac{3}{\cancel{20}}\times\frac{\cancel{40}^{2}}{19}$$

$$=-\frac{6}{19}$$

$$\left(\left(-\frac{1}{5}\right)^2-\frac{2}{5}+\frac{1}{5}\right)\times\left(-\frac{7}{8}\right)$$

$$\left(\frac{1}{25}-\frac{10}{25}+\frac{5}{25}\right)\times-\frac{7}{8}$$

$$=-\frac{\cancel{4}^{1}}{25}\times-\frac{7}{\cancel{8}^{2}}$$

$$=\frac{7}{50}$$

Problems with the homework?

Page 143: Study Guide (Unit 3)
Page 144: #1, 2, 3, 4, 5, 6, 7, 8, 9, 10, and 12
Page 145: #14, 19, 21, 22, and 23
Page 146: ALL!

Homework: Test on chapter 3