0.1 – Review: Fractions

1) Multiplying and Dividing

a) $\left(\frac{1}{5}\right)\left(\frac{2}{3}\right)$ ✓

b) $\left(\frac{-2}{7}\right)\left(\frac{21}{4}\right)$ ✓

c) $\left(\frac{25}{-18}\right)\left(\frac{14}{15}\right)\left(\frac{-6}{7}\right)$

$= \frac{-10}{-3}$

$= \frac{10}{3}$

d) $\frac{1}{2} \div \frac{1}{3}$

$= \frac{1}{2} \times \frac{3}{1}$

$= \frac{3}{2}$

e) $-\frac{3}{10} \div \frac{9}{5}$ ✓

f) $\frac{\left(\frac{-2}{3}\right)\left(\frac{-4}{5}\right)}{\left(\frac{-4}{45}\right)}$

$= \left(\frac{-2}{3}\right)\left(\frac{-4}{5}\right)\left(\frac{45}{-4}\right)$

$= -6$

2) Adding and Subtracting

a) $\frac{3}{5} + \frac{1}{5}$

$= \frac{4}{5}$

b) $\frac{4}{9} - \frac{1}{9}$ *Don't forget to reduce!

$= \frac{3}{9}$

$= \frac{1}{3}$

c) $\frac{1}{4} + \frac{1}{5}$

$= \frac{5}{20} + \frac{4}{20}$

$= \frac{9}{20}$

d) $\frac{3}{7} - \frac{2}{5}$

$= \frac{15}{35} - \frac{14}{35}$

$= \frac{1}{35}$

e) $\frac{1}{3} - \frac{4}{5} + \frac{2}{7}$

$= \frac{5}{15} - \frac{12}{15} + \frac{2}{7}$

$= \frac{-7}{15} + \frac{2}{7}$

$= \frac{-49}{105} + \frac{30}{105}$

$= \frac{-19}{105}$

3) BEDMAS

a) $\left(\frac{1}{3}\right)^2 + \left(\frac{2}{5}\right)\left(\frac{10}{3}\right) - \left(1 - \frac{3}{2}\right)$

$= \left(\frac{1}{3}\right)^2 + \left(\frac{2}{5}\right)\left(\frac{10}{3}\right) - \left(-\frac{1}{2}\right)$

$= \left(\frac{1}{9}\right) + \left(\frac{2}{5}\right)\left(\frac{2}{3}\right) - \left(-\frac{1}{2}\right)$

$= \left(\frac{1}{9}\right) + \frac{4}{3} + \frac{1}{2}$

$= \frac{2}{18} + \frac{24}{18} + \frac{9}{18}$

$= \frac{35}{18}$

b) $\left(\frac{\left(\frac{13}{5}\right)}{\left(\frac{1}{10}\right)\left(\frac{26}{3}\right)}\right)^2 + \left(\frac{-3}{5}\right)\left(\frac{4}{3}\right)$

$= \left(\frac{\left(\frac{13}{5}\right)}{\left(\frac{13}{15}\right)}\right)^2 + \left(-\frac{3}{5}\right)\left(\frac{4}{3}\right)$

$= (3)^2 + \left(-\frac{3}{5}\right)\left(\frac{4}{3}\right)$

$= 9 + \left(-\frac{4}{5}\right)$

$= 9 - \frac{4}{5}$

$= \frac{41}{5}$

From <Lesson 0.1.docx>