E-classroom	**Name:**					
	Gr 8		**Date:**		**Time**	45 mins
CAPS Reference	**1-4 Common Fractions**					
Topic	**1-4-2 Adding and subtracting fractions**					

1. Got it? [10 mins]

Some reminders about adding and subtracting fractions:

The denominators must always be the same.

Example 1: $\frac{3}{11} + \frac{2}{11}$ (Because the denominators are both 11 we calculate 3 + 2

$= \frac{7}{11}$ and use the denominator 11. NOT $\frac{7}{22}$)

Example 2: $\frac{2}{3} + \frac{4}{5}$ (The denominators are NOT the same.)

$= \frac{2\times5}{3\times5} + \frac{4\times3}{5\times3}$ (Convert the fractions to have the same

$= \frac{10}{15} + \frac{12}{15}$ denominator.)

$= \frac{22}{15}$

$= 1\frac{7}{15}$

Example 3: $2\frac{2}{5} + 3\frac{1}{6}$

$= \frac{12}{5} + \frac{19}{6}$ (Convert to an improper fraction.)

$= \frac{12\times6}{5\times6} + \frac{19\times5}{6\times5}$ (Convert the fractions to have the same

$= \frac{72}{30} + \frac{95}{30}$ denominator.)

$= \frac{167}{30}$

$= 5\frac{17}{30}$

2. Go ahead! [25 mins]

2.1 Calculate each of the following using the above methods.
Remember to: turn mixed numbers into "top-heavy" fractions.
write your answers in their lowest terms.

2.1.1 $\frac{3}{7}+\frac{2}{7}$ **2.1.2** $\frac{5}{8}-\frac{3}{8}$ **2.1.3** $\frac{3}{5}+\frac{1}{5}$

2.1.4 $\frac{6}{7}-\frac{2}{7}$ **2.1.5** $\frac{3}{5}+\frac{4}{5}-\frac{2}{5}$ **2.1.6** $\frac{11}{7}+\frac{4}{7}-\frac{6}{7}$

2.1.7 $\frac{6}{11}+\frac{9}{11}+\frac{3}{11}$ **2.1.8** $3\frac{3}{4}+1\frac{1}{4}$ **2.1.9** $2\frac{3}{7}+3\frac{5}{7}$

2.1.10 $3\frac{4}{5}+1\frac{3}{5}$ **2.1.11** $3\frac{5}{6}-2\frac{1}{6}$ **2.1.12** $4\frac{2}{5}+2\frac{2}{5}$

2.2 Calculate each of the following.
Remember to : turn mixed numbers into "top-heavy" fractions.
make sure the denominators are the same
write your answers in their lowest terms.

2.2.1 $\frac{5}{8}+2\frac{1}{4}$ **2.2.2** $3\frac{3}{5}-\frac{7}{10}$ **2.2.3** $3\frac{3}{8}+1\frac{1}{4}$

2.2.4 $4\frac{5}{6}-2\frac{2}{3}$ **2.2.5** $\frac{7}{10}+\frac{4}{5}$ **2.2.6** $4\frac{1}{6}-2\frac{1}{3}$

2.3 Calculate each of the following.
Remember to: turn mixed numbers into "top-heavy" fractions.
make sure the denominators are the same
write your answers in their lowest terms.

2.3.1 $\frac{2}{5}+\frac{1}{4}$ **2.3.2** $\frac{2}{3}+\frac{1}{4}$ **2.3.3** $\frac{5}{9}+\frac{1}{2}$

2.3.4 $\frac{7}{8}-\frac{1}{4}$ **2.3.5** $1\frac{2}{3}-\frac{2}{5}$ **2.3.6** $\frac{9}{10}-\frac{2}{7}$

2.3.7 $\frac{1}{3}+\frac{7}{12}-\frac{1}{6}$ **2.3.8** $\frac{8}{11}+\frac{2}{3}-\frac{8}{11}$ **2.3.9** $\frac{8}{9}+\frac{3}{5}-\frac{7}{10}$

2.3.10 $3\frac{2}{5}+2\frac{1}{4}$ **2.3.11** $4\frac{3}{7}+2\frac{1}{2}$ **2.3.12** $2\frac{5}{7}-\frac{4}{9}+2\frac{1}{3}$

2.3.13 $5\frac{5}{8}-2\frac{2}{3}$ **2.3.14** $3\frac{1}{5}+\frac{7}{10}-\frac{4}{15}$ **2.3.15** $1\frac{3}{7}+2\frac{5}{14}-1\frac{13}{21}$

3. Check your work! [10 mins]

