National 5 Homework	
Algebraic Skills	Algebraic Fraction Calculations

1. Express as a single fraction in its simplest form.

$$\frac{2a}{3} + \frac{4}{5a}$$
, $a \neq 0$

2. Express $\frac{5t}{s} \div \frac{t}{2s^2} s \neq 0$ in its simplest form.

[SQA Paper 2 ; 3 Marks]

3. Work out and simplify

$$\frac{a+5}{4} - \frac{2a-3}{a}$$
, $a \neq 0$

- 4. Express $\frac{5a}{2b} \div \frac{a}{3b^2}$, $b \neq 0$ in its simplest form.
- 5. Express $\frac{2}{p-5} + \frac{4}{p+3}$ $p \neq 5, p \neq -3$ in its simplest form.
- 6. Express $\frac{3t^2}{4p} \div \frac{4t}{5p^2}$, $p \neq 0$ as a single fraction in its simplest form.
- 7. Express $\frac{4}{a+3} + \frac{2}{a-1}$, $a \neq -3$, $a \neq 1$ as a fraction in its simplest form.
- 8. Express $\frac{3}{2a} \frac{5}{a^2}$, $a \neq 0$ as a fraction in its simplest form.
- 9. Express $\frac{7}{x+5} \frac{3}{x}$, $x \neq -5$, $x \neq 0$ as a fraction in its simplest form. [SQA Paper 2; 3 Marks]
- 10. Express $\frac{3t}{5s} \div \frac{6t^2}{7rs}$, $r \neq 0$, $s \neq 0$ as a fraction in its simplest form.