

	Algebraic Fractions	
1	Express $\frac{5}{a^2} - \frac{2}{a}, a \neq 0$ As a single fraction in its simplest form.	2
2	Express $\frac{3}{x-2} + \frac{2}{x+1}, x \neq 2, x \neq -1$ As a single fraction in its simplest form.	3
3	Express $\frac{4}{x+1} - \frac{3}{x-1}, x \neq -1, x \neq 1$ As a single fraction in its simplest form.	3
4	Express $\frac{s^2}{t} \times \frac{3t}{2s}$ As a single fraction in its simplest form.	2
5	Express $\frac{5p}{s} \div \frac{p}{2s^3}$ As a single fraction in its simplest form.	3
6	Express $\frac{2}{n^2-9} \div \frac{1}{n-3}$ As a single fraction in its simplest form.	3
<b>16 marks</b>		

Algebraic Fractions - Answers		
1	Mark 1 common denominator Mark 2 answer given in simplest form One mark will be given for and answer not in simplest form	$\frac{5}{a^2} - \frac{2a}{a^2} \text{ or } \frac{5a}{a^3} - \frac{2a^2}{a^3}$ $\frac{5-2a}{a^2}$ $\frac{5a-2a^2}{a^3}$
2	Mark 1 correct denominator Mark 2 correct numerator Mark 3 remove brackets and collect like terms in the numerator	$\frac{(x-2)(x+1)}{3(x+1) + 2(x-2)}$ $\frac{5x-1}{(x-2)(x+1)}$
3	Mark 1 correct denominator Mark 2 correct numerator Mark 3 remove brackets and collect like terms in the numerator	$\frac{(x+1)(x-1)}{4(x-1) - 3(x+1)}$ $\frac{x-7}{(x+1)(x-1)}$
4	Mark 1 know how to multiply Mark 2 answer given in simplest form	$\frac{3s^2t}{\frac{2st}{3s}}$ $\frac{3s}{2}$
5	Mark 1 start division process Mark 2 cancel one variable Mark 3 express in the simplest form	$\frac{5p}{s} \times \frac{2s^3}{p}$ $\frac{5}{s} \times 2s^3 \text{ or } 5p \times \frac{2s^2}{p}$ $10s^2$
6	Mark 1 start division process Mark 2 Factorise $n^2 - 9$ Mark 3 Multiply fractions and simplify	$\frac{2}{n^2-9} \times \frac{n-3}{1}$ $\frac{2}{(n+3)(n-3)} \times \frac{n-3}{1} = \frac{2}{n+3}$