

## Algebraic Fractions Revision

<b>(a)</b>	<b>(b)</b>	<b>(c)</b>	<b>(d)</b>
Simplify $\frac{x(x-5)}{x^2}$  $\frac{x-5}{x}$	Simplify $\frac{x^2+2x}{x^2+7x+10}$  $\frac{x}{x+5}$	Simplify $\frac{x^2-x-6}{x^2+6x+8}$  $\frac{x-3}{x+4}$	Simplify $\frac{3x^2-13x+4}{x^2-16}$  $\frac{3x-1}{x+4}$
<b>(e)</b>	<b>(f)</b>	<b>(g)</b>	<b>(h)</b>
Simplify $\frac{x^2}{x-2} \times \frac{3x-6}{4x}$  $\frac{3x}{4}$	Simplify $\frac{x(x-1)}{x^2+2x} \div \frac{x^2-1}{3x}$  $\frac{3x}{(x+2)(x+1)}$	Write as a single fraction $\frac{x}{3} + \frac{2x}{5}$  $\frac{11x}{15}$	Write as a single fraction $\frac{5x}{6} - \frac{x}{4}$  $\frac{7x}{12}$
<b>(i)</b>	<b>(j)</b>	<b>(k)</b>	<b>(l)</b>
Simplify fully $\frac{5}{x^2} + \frac{4}{3x}$  $\frac{15+4x}{3x^2}$	Simplify fully $\frac{3}{x+2} - \frac{2}{x-1}$  $\frac{x-5}{(x+2)(x-1)}$	Write as a single fraction $\frac{2x-1}{5} + \frac{x+3}{4}$  $\frac{13x+11}{20}$	Simplify fully $\frac{x}{2x+4} - \frac{3}{x^2+5x+6}$  $\frac{x^2+3x-6}{2(x+2)(x+3)}$
<b>(m)</b>		<b>(n)</b>	
Solve $\frac{x}{3} + \frac{2x-1}{4} = 1$  $x = 1.5$		Solve $\frac{2(x+1)}{5} = \frac{8+x}{6}$  $x = 4$	
<b>(o)</b>			
Solve $\frac{5}{x+3} + \frac{3}{x-1} = 4$  $x = 2, x = -2$			