

## Simplifying Algebraic Fractions

Simplify each of these algebraic fractions, where possible

(a)	(b)	(c)	(d)
$\frac{4x^4 + 5x^2 - 7x}{x}$  $4x^3 + 5x - 7$	$\frac{(x+3)(x-2)}{(x-2)(3x-1)}$  $\frac{x+3}{3x-1}$	$\frac{8x^4 + 4x^3 - 6x}{2x}$  $4x^3 + 2x^2 - 3$	$\frac{(x-2)(x+2)}{x^2 + x - 2}$  $\frac{x-2}{x-1}$
(e)	(f)	(g)	(h)
$\frac{x^2 - x - 6}{2x^2 - 5x - 3}$  $\frac{x+2}{2x+1}$	$\frac{x^2 + 9x + 20}{(x+4)(x-2)}$  $\frac{x+5}{x-2}$	$\frac{x^2 + 2x}{x^2 + 5x + 6}$  $\frac{x}{x+3}$	$\frac{-9x^6 - 12x^3 - 3x}{-3x}$  $3x^5 + 4x^2 + 1$
(i)	(j)	(k)	(l)
$\frac{2x^2 + 7x + 6}{x^2 - 4}$  $\frac{(2x+1)(x+3)}{(x+2)(x-2)}$ Does not simplify	$\frac{x^2 + 6x + 8}{3x^2 + 7x + 2}$  $\frac{x+4}{3x+1}$	$\frac{7x^5 - x^4 - 2}{5x}$  $\frac{7}{5}x^4 - \frac{1}{5}x^3 - \frac{2}{5x}$	$\frac{2x^3 - 5x^2 - 3x}{2x^2 - 9x + 9}$  $\frac{x(2x+1)}{2x-3}$