1.3) Partial fractions

Worked example	Your turn
Split into partial fractions: $$\frac{2x - 6}{(x + 3)(x - 1)}$$	Split into partial fractions: $$\frac{6x - 2}{(x - 3)(x + 1)}$$ $$\frac{4}{x - 3} + \frac{2}{x + 1}$$

Worked example	Your turn
Given that $\frac{-6x^2-5x+2}{x(x-1)(2x+1)} \equiv \frac{A}{x} + \frac{B}{x-1} + \frac{C}{2x+1}$, find the values of the constants A, B, C.	Given that $\frac{6x^2+5x-2}{x(x-1)(2x+1)} \equiv \frac{A}{x} + \frac{B}{x-1} + \frac{C}{2x+1}$, find the values of the constants A, B, C.
	$A = 2, B = 3, C = -4$

Worked example	Your turn
Express as partial fractions: $$\dfrac{6x^2 + 14x - 12}{x^3 - 4x}$$	Express as partial fractions: $$\dfrac{6x^2 + 7x - 3}{x^3 - x}$$ $$\dfrac{3}{x} - \dfrac{2}{x+1} + \dfrac{5}{x-1}$$