

## Lesson 6

### Partial Fractions : Pure Year 2

#### 6.1 More Past Paper Partial Fractions (Homework)

##### Question 1

*C4 examination question from June 2009, Q3 (a)*

$$f(x) = \frac{4 - 2x}{(2x + 1)(x + 1)(x + 3)} = \frac{A}{2x + 1} + \frac{B}{x + 1} + \frac{C}{x + 3}$$

Find the values of the constants  $A$ ,  $B$  and  $C$

[ 4 marks ]

**Question 2***C4 examination question from June 2011, Q1*

$$\frac{9x^2}{(x-1)^2(2x+1)} = \frac{A}{(x-1)} + \frac{B}{(x-1)^2} + \frac{C}{(2x+1)}$$

Find the values of the constants  $A$ ,  $B$  and  $C$

[ 4 marks ]

### Question 3

*C4 examination question from June 2007, Q4 (a)*

$$\frac{2(4x^2 + 1)}{(2x + 1)(2x - 1)} = A + \frac{B}{(2x + 1)} + \frac{C}{(2x - 1)}$$

Find the values of the constants  $A$ ,  $B$  and  $C$

[ 4 marks ]

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