

Partial Fractions Exam Questions (From OCR 4724)**Q1 (Jun 2005, Q8) [Modified]**

(i) Given that $\frac{3x+4}{(1+x)(2+x)^2} \equiv \frac{A}{1+x} + \frac{B}{2+x} + \frac{C}{(2+x)^2}$, find A , B and C . [5]

Q2 (Jan 2006, Q7) [Modified]

The expression $\frac{11+8x}{(2-x)(1+x)^2}$ is denoted by $f(x)$.

(i) Express $f(x)$ in the form $\frac{A}{2-x} + \frac{B}{1+x} + \frac{C}{(1+x)^2}$, where A , B and C are constants. [5]

Q3 (Jun 2007, Q1) [Modified]

The equation of a curve is $y = f(x)$, where $f(x) = \frac{3x+1}{(x+2)(x-3)}$.

(i) Express $f(x)$ in partial fractions. [2]

Q4 (Jan 2008, Q2)

(i) Express $\frac{x}{(x+1)(x+2)}$ in partial fractions. [3]

Q5 (Jun 2010, Q3)

Express $\frac{x^2}{(x-1)^2(x-2)}$ in partial fractions. [5]

Q6 (Jun 2013, Q1)

Express $\frac{(x-7)(x-2)}{(x+2)(x-1)^2}$ in partial fractions. [5]
