

Unit 4

Partial Fractions

1	The identity $(5x + 4)^2 = 25x^2 + 40x + 16$ is true for	One value of x	Two values of x	✓ All values of x	None of these
2	A function $f(x) = \frac{N(x)}{D(x)}$, with $D(x) \neq 0$, where $N(x)$ and $D(x)$ are polynomials in x is called	An identity	An equation	✓ A fraction	None of these
3	A fraction in which the degree of numerator is greater or equal to the degree of denominator is called	a proper fraction	✓ an improper fraction	an equation	Algebraic relation
4	A fraction in which the degree of numerator is less than the degree of denominator is called	an equation	an improper fraction	an identity	✓ a proper fraction
5	$\frac{2x+1}{(x+1)(x-1)}$ is	an improper fraction	an equation	✓ a proper fraction	none of these
6	$(x + 3)^2 = x^2 + 6x + 9$ is	a linear equation	an equation	✓ an identity	none of these
7	$\frac{x^3+1}{(x-1)(x+2)}$ is	a proper fraction	✓ an improper fraction	an identity	a constant term
8	Proper fraction of $\frac{x-2}{(x-1)(x+2)}$ are the form	✓ $\frac{A}{x-1} + \frac{B}{x+2}$	$\frac{Ax}{x-1} + \frac{B}{x+2}$	$\frac{A}{x-1} + \frac{Bx+C}{x+2}$	$\frac{Ax+B}{x-1} + \frac{C}{x+2}$
9	Proper fraction of $\frac{x+2}{(x+1)(x^2+2)}$ are the form	$\frac{A}{x+1} + \frac{B}{x^2+2}$	✓ $\frac{A}{x+1} + \frac{Bx+C}{x^2+2}$	$\frac{Ax+B}{x+1} + \frac{C}{x^2+2}$	$\frac{A}{x+1} + \frac{Bx}{x^2+2}$
10	Proper fraction of $\frac{x^2+1}{(x+1)(x-1)}$ are the form	$\frac{A}{x+1} + \frac{B}{x-1}$	$1 + \frac{A}{x+1} + \frac{Bx+c}{x-1}$	✓ $1 + \frac{A}{x+1} + \frac{B}{x-1}$	$\frac{Ax+B}{x+1} + \frac{C}{x-1}$