

## PARTIAL FRACTIONS CHALLENGE

Use questions 1 to 6 to find and check the values represented by a,b,c,d,e and f

Questions 7,8 and 9 express as partial fractions.

1	$\frac{5x + 18}{(x + 2)(x + 4)} = \frac{a}{x + 4} + \frac{b}{x + 2}$
2	$\frac{3x + 10}{(x - 2)(x + 2)} = \frac{b}{x - 2} + \frac{c}{x + 2}$
3	$\frac{2x + 9}{(x + 3)(x + 4)} = \frac{d}{x + 3} + \frac{c}{x + 4}$
4	$\frac{x + 5}{(x - 1)(x - 4)} = \frac{d}{x - 4} + \frac{e}{x - 1}$
5	$\frac{4 - 2x^2}{(x + 1)(x + 2)} = \frac{f}{x + 1} + \frac{ex}{x + 2}$
6	$\frac{4x - 1}{(x - 1)^2} = \frac{b}{x - 1} + \frac{d}{(x - 1)^2}$
7	$\frac{x - 1}{(2x + 3)^2} =$
8	$\frac{3x - 1}{(3x - 2)(x - 1)^2} =$
9	$\frac{18}{(x + 2)(x - 1)(x - 4)} =$