

## Essential Skills 21

The questions in this series of worksheets appear frequently.

These are the GIFTS you must take to succeed



### Algebraic Fractions 2 (Non Calculator)

By factorising numerators and denominators, simplify:

1.  $\frac{x^2+5x+6}{3x+6}$

2.  $\frac{x^2+4x-21}{2x+14}$

3.  $\frac{x^2+8x+12}{x^2+6x}$

4.  $\frac{x^2-9x+14}{x^2+3x-10}$

5.  $\frac{2x^2-5x-3}{x^2-9}$

6.  $\frac{3x-2}{3x^2+13x-10}$

7.  $\frac{2x^2-50}{4x^2-19x-5}$

8.  $\frac{4x^2-4x-3}{2x^2-5x+3}$

9.  $\frac{2x^2+7x+3}{3x^2+8x-3}$

10.  $\frac{x^2+x-56}{2x^2+11x-40}$

### APPLYING QUESTION

(a)  $x^2 - 3x - 54$

(b) Hence, simplify  $\frac{x^2-3x-54}{3x^2+17x-6}$

