## Essential Skills 4

The questions in this series of worksheets appear frequently.
These are the GIFTS you must take to succeed
Algebraic Fractions (Non Calculator)
Write as a fraction in its simplest form:

1. $\frac{3}{x+4}+\frac{2}{x+1}$
2. $\frac{4}{x-5}+\frac{3}{x+2}$
3. $\frac{1}{x+2}-\frac{3}{x+7}$
4. $\frac{6}{2 x-1}-\frac{2}{x-1}$
5. $\frac{2}{x+3}-\frac{2}{3 x+1}$
6. $\frac{x-3}{5}+\frac{x+2}{2}$
7. $\frac{2 b+3}{3}-\frac{b}{5}$
8. $\frac{1}{p-1}+\frac{3}{3 p+5}$
9. $\frac{3 x-1}{3}-\frac{2 x-3}{2}$
10. $\frac{1}{x}+\frac{3}{x^{2}}$

## APPLYING QUESTION

A cyclist cycling on difficult terrain was able to cover $x \mathrm{~km}$ at $4 \mathrm{~km} / \mathrm{h}$

(a) Write an expression in terms of $x$ for time of his journey.

On the return leg they took a more favourable route with 3 additional km . They were able to cycle at a speed of $6 \mathrm{~km} / \mathrm{h}$
(b) Work out, as a single fraction in terms of $x$, the total time for the whole journey.

