## Essential Skills 14

The questions in this series of worksheets appear frequently.
These are the GIFTS you must take to succeed
Rationalising the Denominator (Non Calculator)
Write the following with a rational denominator in its simplest form:

1. $\frac{3}{\sqrt{5}}$
2. $\frac{4}{\sqrt{6}}$
3. $\frac{8}{\sqrt{2}}$
4. $\frac{1}{2 \sqrt{7}}$
5. $\frac{5}{3 \sqrt{3}}$
6. $\frac{4}{3 \sqrt{6}}$
7. $\frac{\sqrt{2}}{3 \sqrt{5}}$
8. $\frac{\sqrt{3}}{\sqrt{15}}$
9. $\frac{5}{\sqrt{8}} \quad{ }^{*}$ Careful
10. $\frac{2}{\sqrt{48}}$
*Careful

APPLYING QUESTIONS
(1) Given that

$$
f(x)=\frac{5}{4 \sqrt{x}}
$$

Evaluate $f(15)$, writing your answer with a rational denominator in its simplest form.

## (2) *Non Calculator

Calculate the mean and standard deviation of:

$$
\begin{array}{lllllll}
11 & 14 & 10 & 13 & 13 & 10 & 13
\end{array}
$$

Write your answer with a rational denominator in its simplest form

