## CHAPTER 2: QUADRATIC EXPRESSIONS AND EQUATIONS

## (4) Cloned SPM Question (2006, Paper 2)

Solve the quadratic equation $\frac{4 p(p-2)}{3}=p+5$.

## Solution

$$
\begin{aligned}
\frac{4 p(p-2)}{3} & =p+5 \\
4 p(p-2) & =3(p+5) \\
4 p^{2}-8 p & =3 p+15 \\
4 p^{2}-8 p-3 p-15 & =0 \\
4 p^{2}-11 p-15 & =0 \\
(p+1)(4 p-15) & =0 \\
p & =-1, \frac{15}{4}
\end{aligned}
$$

## Pointers

- Multiply both sides of the equation by 3 to eliminate the fraction on the LHS.
- Expand the LHS and RHS of the equation.
- Arrange the equation in the general form.
- Factorisation can be done mentally, but $(p+1)(4 p-15)=0$ should be written clearly to earn full marks.

