

CHAPTER 2: QUADRATIC EXPRESSIONS AND EQUATIONS



Cloned SPM Question (2006, Paper 2)

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

Solution

$$\frac{4p(p-2)}{3} = p+5$$

$$4p(p-2) = 3(p+5)$$

$$4p^{2}-8p = 3p+15$$

$$4p^{2}-8p-3p-15 = 0$$

$$4p^{2}-11p-15 = 0$$

$$(p+1)(4p-15) = 0$$

$$p = -1, \ \frac{15}{4}$$

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)(4p 15) = 0 should be written clearly to earn full marks.