

# 1 Lesson Plan: 7th June

- Discussion/review of proportion
  - “show” and graph type questions
- Error analysis on algebraic subjects (next page in this file)
- Algebra subject Book Question Worksheet 1 (separate file)
  - Everything (Q1-10) except Q1(x)
  - Potential discussion questions:
    - \* Q1(w) is potentially challenging
    - \* Q10(ii) is theoretical
- Bedok Town SS 2012
  - (If time permits) Paper 1 Q1-6, 8, 11
  - (If time permits) Paper 2 Q3, 5, 6 (graph)

## 2 Error analysis

Identify and explain the errors in the following solutions, and write out the correct solution instead.

### 2.1 Question 1

It is given that  $2p = \sqrt{q^3 - 3p}$ . Express  $q$  in terms of  $p$ .

**Student's attempt**

$$2p = \sqrt{q^3 - 3p} \quad (1)$$

$$2p^2 = q^3 - 3p \quad (2)$$

$$q^3 = 2p^2 + 3p \quad (3)$$

$$q = \pm \sqrt[3]{2p^2 + 3p} \quad (4)$$

### 2.2 Question 2

It is given that  $\frac{x}{3} - y = 7xy + 3$ . Express  $x$  in terms of  $y$ .

**Student's attempt**

$$\frac{x}{3} - y = 7xy + 3 \quad (1)$$

$$\frac{x}{3} = 7xy + 3 + y \quad (2)$$

$$x = 21xy + 3 + y \quad (3)$$