SUBJECT: MATHEMATICS

SOLUTION WORKSHEET # 2

STRAND:		M2 – Algebra
SUB-STRAND:		M2.2 - Equations
CONTENT LEARNING OUTCOME:	*Concepts, Skills and Attitudes:*	Demonstrate and solve statements of mathematical patterns to write equations using pronumerals.
	Suggested MiLO:	Write equations using pronumerals to solve mathematical patterns.

LESSON NOTES

ALGEBRAIC ABBREVIATIONS

Algebra is the study of mathematical symbols and the rules for using these symbols. It provides a short way of writing ideas in mathematics. Since pronumerals take the place of numerals they behave the same way when we perform operations with them. When writing algebraic expressions, we try to shorten or simplify the expression as much as possible. Look at the example given below.

> **3 x a** is written as *3a*, and **a x b** is written as *ab*
>
> **x ÷ 5** is written as $\frac{x}{5}$ and **a ÷ b** is written as $\frac{a}{b}$

> Example: $3 + 3 + 3 + 3$ is the same as 4 lots of 3, or 4 times 3
>
>   so:-   y + y + y + y is 4 lots of y, or *4y*

ANSWERS

1. (a)   **3a**   (b) $\frac{g}{7}$ (c)   *abc*

   (d)   **7y + 35**   (e)   **6m – 6n**   (f) $\frac{4x}{3}$

2. (a)   *d ÷ 5*   (b)   **8 ÷ n**   (c)   *p x q + 9*

   (d)   **(5 x b) ÷ (7 x d)**   (e)   **3 (k – v)**   (f)   **(12 x m) ÷ (16 x m)**