

# පරිච්ඡේදය ~ 01

## මූලික ගණිතය හැඳින්වීම

### විෂය ප්‍රකාශන සුළු කිරීම (Simplification of Algebraic Expression)

- |                                    |   |
|------------------------------------|---|
| i. $2x + 3x - 10 + 7$              | ii. $5x - 7y - 3x - 8y$                   |
| iii. $3x^2 - 5x - x^2 + x - 9 + 7$ | iv. $5(3x - 2) - 4(x - 1)$                |
| v. $4(3x - 2y) - 5(x - 3y)$        | vi. $3\{2x - 5(x - 2)\} + 7$              |
| vii. $5[2x - 3\{4x - 5(x - 1)\}]$  | viii. $12 - 3[4x - 5\{2 - (5 - x)\} + 1]$ |
| ix. $(2x + 3)(3x + 5)$             | x. $(3x - 2)(4x + 3)$                     |
| xi. $(2x - 3)^2$                   | xii. $4(3x - 2)^2$                        |
| xiii. $12x - 3(x - 1)^2$           | xiv. $2(3x - 2)^2 - 3(2x - 3)^2$          |

### ආදේශ කිරීම (Substitutions)

$a = 2, b = -3, c = -1$  නම් අගය සොයන්න.

- |                                    |                               |
|------------------------------------|-------------------------------|
| 1. $3a + 5b - 2c$                  | 2. $3a^2 - 5b^2 + 2c^2$       |
| 3. $\frac{a^3 - ab - c^2}{ab - 1}$ | 4. $(a - b)(a^2 - b^2 + c^2)$ |

### සාධක (Factors)

#### පොදු සාධක (Common Factors)

- |                                    |                                 |
|------------------------------------|---------------------------------|
| (i) $a^2 + ab$                     | (ii) $x^3y^4 - x^4y^3 - x^3y^3$ |
| (iii) $15a^3b - 10ab^2 + 25a^2b^3$ | (iv) $a^2 + ab + ac + bc$       |
| (v) $ab + y^2 - by - ay$           |                                 |

ලිපි (Trinomials)

1.  $x^2 + 7x + 10$

2.  $x^2 - 8x + 15$

3.  $x^2 - 5x - 24$

4.  $x^2 - 2x - 48$

5.  $3x^2 + 4x - 15$

6.  $10x^2 - 11x - 18$

7.  $15x^2 + 22x - 48$

8.  $x^2 + 6xy - 91y^2$



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