

JOY INTERNATIONAL COLLEGE

SUBJECT: MATHEMATICS

CLASS: JSS 2

S/NO.	WEEKS	TOPIC	CONTENT	OBJECTIVES
1.	1	ALGEBRAIC EXPRESSIONS	Study: <ul style="list-style-type: none"> • Substitution in algebraic expressions 	By the end of this chapter you should be able to; <ul style="list-style-type: none"> ✓ Substitute values for letters in algebra ✓ Solve problems on substitution in algebraic expressions
2.	2	ALGEBRAIC EXPRESSIONS	<ul style="list-style-type: none"> • Expansion of algebraic terms and expansions of algebraic expressions. 	By the end of this chapter you should be able to; <ul style="list-style-type: none"> ✓ Multiply algebraic terms by numbers/letters and collect like terms/simplify where necessary ✓ Open simple brackets in algebra of the form $a(b+c)$ ✓ Expand brackets of algebraic terms of the form $(a+b)(c+d)$

INSTRUCTION: Answer all questions from this section.

Questions from week one topic.

Find the value of these expressions when $a=2$, $b=4$ and $c=6$ (use this to answer questions 1 to 5)

1] $5a + 2b$

- | | |
|--------|--------|
| (a) 14 | (b) 15 |
| (c) 17 | (d) 18 |

2] $3(a - 3c)$

- | | |
|---------|---------|
| (a) 20 | (b) -30 |
| (c) -48 | (d) 60 |

3] $4c - 3b$

- | | |
|--------|--------|
| (a) 12 | (b) 13 |
| (c) 15 | (d) 14 |

4] $\frac{4a+b}{c}$

- | | |
|-------|-------|
| (a) 2 | (b) 3 |
| (c) 5 | (d) 6 |

5] $2b^2 - c^2$

- | | |
|--------|--------|
| (a) -2 | (b) -3 |
| (c) -5 | (d) -4 |

Find the value of these expressions when $x=6$, $y= -4$ and $z= -3$ (use this to answer questions 6 to 10)

6] $4y+3x$

- | | |
|-------|--------|
| (a) 2 | (b) -2 |
| (c) 3 | (d) -3 |

$$7] \frac{4x+3y}{z}$$

- (a) -4 (b) +4
(c) -6 (d) +6

$$8] \frac{2x-y}{y^2-x}$$

- (a) 1.2 (b) -1.2
(c) 1.6 (d) 3

$$9] \frac{2x^2+3y}{yz}$$

- (a) 2 (b) 3
(c) 5 (d) 6

$$10] 2x^2 + 3y - 5z$$

- (a) 62 (b) 93
(c) 75 (d) 86

Questions from week two topic

1] Remove brackets from this $5(2p-q)$.

- (a) $10p+q$ (b) $10p-5q$
(c) $10p+5q$ (d) $5p+5q$

2] remove brackets and simplify $4(x+2) + 2(3x-1)$

- (a) $2x + 3$ (b) $10x + 6$
(c) $10x - 6$ (d) $5x + 2$

3] remove brackets and simplify $17y - 2(6y+1) = 8$

- (a) $5y + 3$ (b) $10y + 6$
(c) $10y - 6$ (d) $5y + 6$

4] Remove brackets $x(x-2) + 7(x-2)$ and simplify.

- (a) $x^2+6x+14$ (b) $x^2+4x-14$
(c) $x^2+5x-14$ (d) $x^2-5x-14$

5] Expand and simplify $(a+3)(a+4)$

- (a) $a^2+7a+12$ (b) $a^2-5a+12$
(c) $a^2+5a-12$ (d) $a^2-7a-12$

6] Expand and simplify $(x+3)^2$

- (a) $x^2+6x+14$ (b) $x^2+6x+12$
(c) x^2+6x+6 (d) x^2+6x+9

7] Expand and simplify $(2m+4)^2$

- (a) $4m^2+16m+18$ (b) $4m^2 - 16m+16$
(c) $4m^2+6m+16$ (d) $4m^2+16m+16$

8] Expand and simplify $(3b - 2)^2$

- (a) $9b^2 - 12b + 4$ (b) $9b^2 - 12b - 4$
(c) $9b^2 + 12b + 4$ (d) $9b^2 + 12b - 4$

9] Expand and simplify $(x+3y)(x - 3y)$

- (a) $x^2 - y^2$ (b) $x^2 + 9y^2$
(c) $x^2 - 9y^2$ (d) $x^2 - 9xy - 9y^2$

10] Expand and simplify $(4x - 3y)(2x+2y)$

- (a) $4x^2+2xy - 3y^2$ (b) $8x^2+2xy - 6y^2$

$$(c) x^2+2xy - 6y^2$$

$$(d) 8x^2+2xy + 6y^2$$

SECTION B(essay questions).**Instruction: Answer all questions from this section and show your workings.**

1. Find the value of $\frac{2x^2+3y^2-3z}{-x}$ when $x = -5$, $y = -2$ and $z = 4$
2. Expand $(2x+3y)(4x-2y)$

- Students should feel very free to interact with any of the above teachers via whatsapp, email or phone calls for assistance, enquiries, questions or clarifications.
- Students should solve essay questions in their test and assignment notebooks.
Thank you.

Examiners' contacts:

S/N	NAME	EMAIL	PHONE NUMBER
1	Baushe Joseph Dauda	davidbaushe@gmail.com	0902-453-5436
2	Kingsley Nkem	Kingsleynkem548@gmail.com	0907-067-4074
3	Mr Dajel Joel		0703-608-5293