## SECOND TERM WEEKLY LESSON NOTES WEEK 4

Week Ending: 28	-04-2023	DAY:	Subject: Mathematics	
Duration: 60MINS	5		Strand: Number	
Class: B8		Class Size:	Sub Strand: Algebraic	Expressions
<b>Content Standard:</b> B8.2.1.1 Demonstrate the ability to draw table of values for a linear relation		Indicator: B8.2.2.1.1 Use the distributive property to remove brackets and solve multiplication of binomial expression		Lesson: on I of 2
<b>Performance Indicator:</b> Learners can use the distributive brackets and solve multiplication			<b>Core Competencies:</b> Communication and Colla Critical Thinking and Prob	
References: Math	ematics Curric	ulum Pg. 115-116		
Phase/Duration PHASE 1: <b>STARTER</b>	Learners Acti Revise with le	vities earners on the previous lesson.		Resources
PHASE 2: NEW	lesson.	nance indicators with learners a		Counters,
LEARNING	<ul> <li>Expanding expression is a way of removing brackets or parenthesis from an expression.</li> <li>To expand a given expression;</li> <li>Multiply every term inside the brackets by the term outside the brackets.</li> <li>Change the operators accordingly and combine the terms.</li> <li>Write this question on the board and task learners to solve in pairs.</li> <li>Expand -5x (3x + 4)</li> </ul>			bundle and loose straws base ten cut square, Bundle of sticks
	Solution $\frac{Solution}{-5x(3x + 4)} = -5x(3x) - 5x(4)$ $= -15x^{2} - 20x$ So the expanded form of -5x (3x + 4) is -15x^{2} - 20x. Let learners solve the following a) $3(x + 4) - 2(x - 5)$ b) $2(6-5x) - 3(2+2x)$ Solution To simplify $3(x + 4) - 2(x - 5)$ , we first distribute the 3 and -2 across			
	the terms insi $3(x + 4) - 2(x)$	(x + 4) - 2(x - 5), we first distrib ide the parentheses: (x - 5) = 3x + 12 - 2x + 10 combine like terms:	oute the 3 and -2 across	

3x - 2x + 12 + 10 = x + 22 Therefore, the simplified form of $3(x + 4) - 2(x - 5)$ is $x + 22$ . Guide learners to multiply binomial expressions. To multiply two binomial expressions, you can use the FOIL method, which stands for First, Outer, Inner, Last. 1. Multiply the first term of each binomial together. 2. Multiply the outer terms of each binomial together. 3. Multiply the inner terms of each binomial together. 4. Multiply the last term of each binomial together. 5. Add the results of steps 1-4 to obtain the final product. Write this example on the board and let learners solve in pairs: (3x + 2)(2x - 5) Using the FOIL method, we get: First: $(3x)(2x) = 6x^2$ Outer: $(3x)(-5) = -15x$ Inner: $(2)(2x) = 4x$ Last: $(2)(-5) = -10$ Adding the results of steps 1-4, we get: $6x^2 - 15x + 4x - 10$ Simplifying, we get: $6x^2 - 11x - 10$ Therefore, the product of $(3x + 2)(2x - 5)$ is $6x^2 - 11x - 10$ . Learners work in groups to solve the following.		
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		Therefore, the product of $(3x + 2)(2x - 5)$ is $6x^2 - 11x - 10$ .
a) $(y+3)(y+7)$		
b) (k-4) (k+10)		
c) $(2x+5)(3x-1)$		
d) $(x-5)(6x+12)$		
e) (2t+3) (3t-1)		
	PHASE 3:	
<b>REFLECTION</b> learners what they have learnt during the lesson.	REFLECTION	learners what they have learnt during the lesson.
Take feedback from learners and summarize the lesson.		I ake teedback from learners and summarize the lesson.

Week Ending: 28	-04-2023	DAY:	Subject: Mathematics	
Duration: 60MINS			Strand: Number	
Class: B8	Class Size: Sub Strand: Algebraid		Expressions	
<b>Content Standard:</b> B8.2.1.1 Demonstrate the ability to draw table of values for a linear relation		Indicator: B8.2.2.1.1 Use the distributive property to remove brackets and solve multiplication of binomial expressio		Lesson: on I of 2
Performance Indicator: Learners can use the distributive brackets and solve multiplication References: Mathematics Curricu		of binomial expression	<b>Core Competencies:</b> Communication and Collal Critical Thinking and Prob	
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Phase/Duration PHASE 1: <b>STARTER</b>		vities earners on the previous lesson. nance indicators with learners a	and introduce the	Resources
PHASE 2: NEW LEARNING	Guide learner To multiply two stands for First 1. Multiply the 2. Multiply the 3. Multiply the 4. Multiply the 5. Add the resu Write this exe (3x + 2)(2x - 1) Using the FOI First: $(3x)(2x)$ Outer: $(3x)(-5) =$ Adding the re $6x^2 - 15x + 4x$ Simplifying, we $6x^2 - 11x - 10$ Therefore, the	IL method, we get: $5 = 6x^{2}$ 5) = -15x = 4x -10 sults of steps 1-4, we get: x - 10 e get:	er the FOIL method, which er. ether. ether. er. I product. mers solve in pairs: 6x <sup>2</sup> - 11x - 10.	Counters, bundle and loose straws base ten cut square, Bundle of sticks

	Solution To solve the expression (y+3)(y+7), we can use the FOIL method:
	To solve the expression $(y+3)(y+7)$ , we can use the FOIL method.
	First: $y * y = y^2$
	Outer: y * 7 = 7y
	Inner: 3 * y = 3y Last: 3 * 7 = 21
	Last. $J = 7 = 21$
	Putting all of the results together, we get:
	$y^2 + 7y + 3y + 21$
	Simplifying, we get:
	$y^2 + 10y + 21$
	Therefore, $(y+3)(y+7)$ simplifies to $y^2 + 10y + 21$ .
	To solve the expression $(2x+5)(3x-1)$ , we can use the FOIL method:
	First: $2x * 3x = 6x^{2}$
	Outer: $2x * (-1) = -2x$
	Inner: $5 * 3x = 15x$ Last: $5 * (-1) = -5$
	Putting all of the results together, we get:
	$6x^2 - 2x + 15x - 5$
	Simplifying, we get:
	$6x^2 + 13x - 5$
	Therefore, $(2x+5)(3x-1)$ simplifies to $6x^2 + 13x - 5$ .
	Assessment
	Expand and simplify the following
	a) $(k + 2m)^2$
	b) $(2n + 3)^2$ c) $(4x + 5)^2$
	d) $(x - 6)(x - 6)$
	e) (h+8)(h-8)
PHASE 3:	Use peer discussion and effective questioning to find out from
REFLECTION	learners what they have learnt during the lesson.
	Take feedback from learners and summarize the lesson.
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