MATHEMATICS PROGRAMME FOR GRADE 11 LEARNERS FROM 27 APRIL – 8 MAY 2020

TOPIC: ANALYTICAL GEOMETRY
MARKS IN EXAMINATION PAPER: 30 +/- 3 MARKS IN PAPER 2
MAIN RESOURCE(S) SUGGESTED: EVERYTHING MATHS BY SIYAVULA
ADDITIONAL RESOURCES: ANY APPROVED TEXTBOOKS AND/OR STUDY GUIDES

MEDIA:
- DSTV CHANNEL 319.
- ECDOE WEBSITE http://www.ecdoe.co.za/ http://www.ecexams.co.za/ http://www.eccurriculum.co.za/
- DBE WEBSITE. https://www.education.gov.za/
- SIYAVULA WEBSITE. www.siyavula.com or www.everythingmaths.co.za or m.everthingmaths.co.za

WEEK 1: 27 APRIL – 01 MAY 2020

USE EVERYTHING MATHS - SIYAVULA (CHAPTER 4) GRADE 11(PAGE 104 TO 142) AS FOLLOWS:

- Read and follow the explanation about the topic/ concept.
- Follow and practice Worked Examples step by step
- Then do Exercises given in the book.
- Always make a rough sketch before you do the exercises.
- To get answers for the exercises use the codes given below the exercises and log in to (www.siyavula.com)
- Then check your solutions against solutions provided.
- For more practice use Intelligent Practice Service of Siyavula.
- Then do corrections.
- Double or triple check if you are able to do Exercises on your own without looking at the solutions until you master the concept(s).

DATE	WHAT TO LEARN	PAGE(S)	WORKED EXAMPLE	PAGES	EXERCISE	PAGE(S)
27/04	**GR: 10 Revision** 1.Distance between two points. 2.Gradient of the line 3. Midpoint of a line segment See video: 22JD, 22JF at www.everythingmaths. co.za	104-105	1: Revision	106-108	4 – 1: Revision Q.1 - 7	112
28/04	Properties of Quadrilaterals Parallelogram, rectangle, rhombus, square, trapezium and kite.	108-109	2: Quadrilaterals	110-112	4 - 1: Revision Q. 8-10	112-113
29/04	Equation of a line	113	3: The two points form of a straight-line equation	114-115	4 - 2: Q. 1 - 9	115
30/04	The gradient- point form of the straight-line equation	116	4 - 5	116-118	4 - 3: Q. 1 - 9	119
01/05	The gradient- intercept form of a straight-line equation	119-120	6 - 7	120-122	4 - 4: Q.1 - 6	123

DATE	WHAT TO LEARN	PAGE(S)	WORKED EXAMPLE	PAGE(S)	EXERCISE	PAGE(S)
4/05	Inclination of a line	124-125	8-10	127-130	4 – 5: Q. 2 4 – 6: Q. 1 - 2	126 130-131
5/05	Parallel lines	132	11-12	133- 135	4 - 7: Q. 1 - 5	136
6/05	Perpendicular lines	136-138	13-14	139-141	4 – 8: Q. 1 - 5	141-142
7/05	**PRACTICE END OF CHAPTER EXERCISES CHOOSE AT LEAST ONE FROM 1 - 9 EACH**				4 – 9: Q.1 - 9	143-144
8/05	**PAST EXAM PAPERS**	**MATHEMATICS P2 – NOVEMBER 2019**			QUESTIONS 3 & 4	See below

QUESTION 3

In the diagram, A(–2 ; 2), B(–4 ; –6), C(4 ; –2) and E(6 ; y) are the vertices of a quadrilateral having AE ∥ BC. D lies on BC such that AD ⊥ BC and AC is drawn. M(x ; 2) is a point on EC.
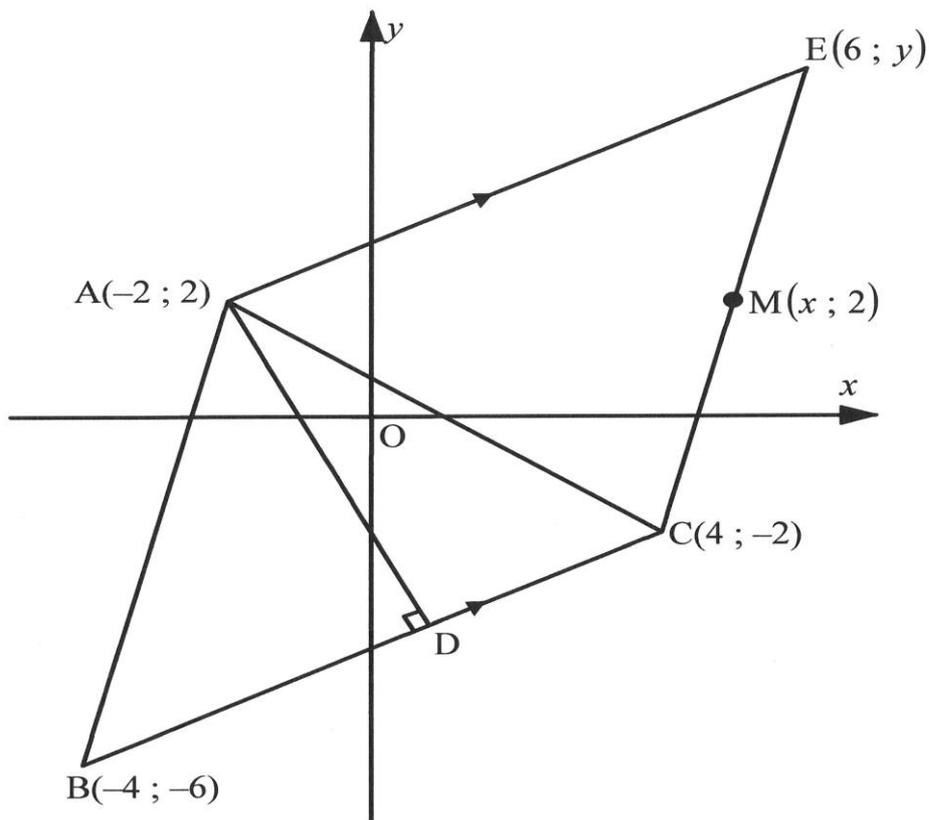
3.1   Calculate the gradient of BC.   (3)

3.2   If M is the midpoint of EC, determine the values of x and y.   (3)

3.3   Calculate the length of BC.   (2)

| 3.4	If it is further given that $AE = \sqrt{80}$, to which group of special quadrilaterals does ABCE belong?	(1)
3.5	Determine the equation of AD in the form $y = mx + c$.	(3)
3.6	Calculate the coordinates of D.	(5)
3.7	Determine the area of $\triangle AEC$.	(3)
		[20]

QUESTION 4

In the diagram, B is a point on the y-axis. A(4 ; y), B, C(3 ; 0) and D(7 ; 6) are the vertices of rectangle ABCD. Diagonals BD and AC are drawn. The inclination of DC is α and $B\hat{A}C = \theta$.
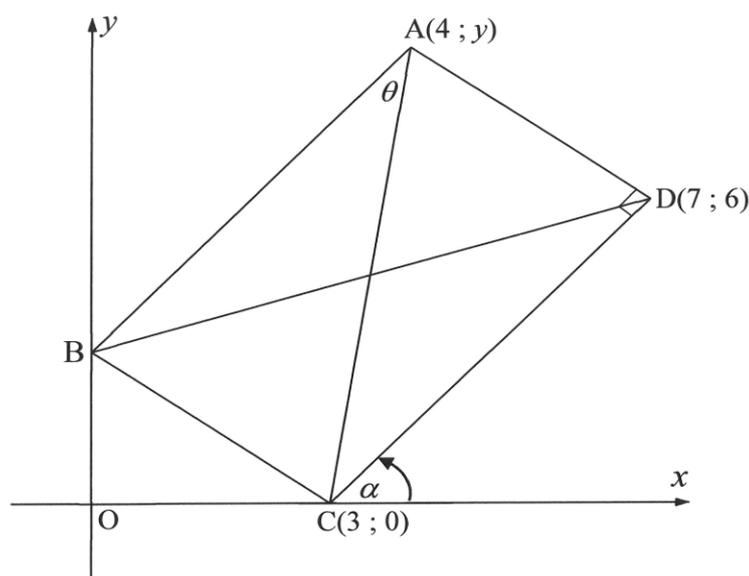
4.1	Determine the gradient of CD.	(2)
4.2	Calculate the size of α.	(2)
4.3	Determine the value of y.	(4)
4.4	Calculate the size of θ.	(5)
		[13]

REMEMBER, PRACTICE MAKES PERFECT!

SO, PRACTICE, PRACTICE AND PRACTICE!

building blocks for growth.

Ikamva eliqaqambileyo!