



Moderated item 7

MATHEMATICS

*Time Allowed: 2 Hours 30 Minutes*

**SECTION A (40marks)**

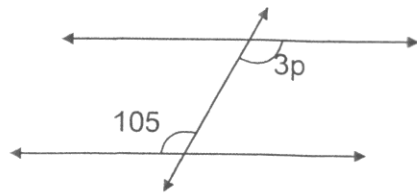
1. Add: 32 to 14.

2. Write the numeral 5045 in words.

3. Given that set  $K = \{\text{prime numbers between 10 and 20}\}$ .  
Find  $n(K)$

33. Workout:  $2\frac{1}{2} \div \frac{1}{4}$

34. Calculate the value of P in the diagram below:



35. Simplify:  $3(p - q) - (p + q)$

36. A taxi reached Entebbe at 4:10pm from Kampala, the journey took 80 minutes. When did it leave Kampala?

37. Find the next number in the sequence 256, 64, 16, 4, \_\_\_\_\_

38. Using a ruler, pencil and a pair of compasses only construct an angle of  $120^\circ$  at point P below.



39. Solve:  $3x + 7 \leq 13$

40. Work out the lowest common factor (L.C.F) of 12 and 15.

41. Study the table below and find the median mark.

No. of pupils	1	3	2	1
Marks scored	30	15	25	10

42. Given that  $a = -3$ ,  $b = 2$ . Find the value of  $2a + 2b$ .

43. Simplify:  $+11 + -15$

44. Cooking oil is sold in 250ml packets. How much money would Joshua pay for one litre of cooking oil, if the market price of  $\frac{1}{2}$  litre is 1700 shillings.

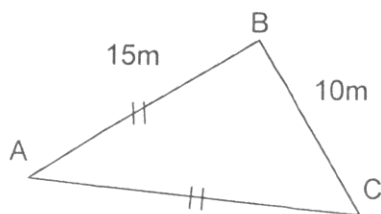
45. Simplify:  $2^4 \div 2^2$

46. Workout:  $5.4 \div 0.9$

47. Express 12:40pm in a twenty-four-hour clock system.

48. Round off 380.59 to the nearest whole number.

49. Work out the perimeter of the figure ABC below.

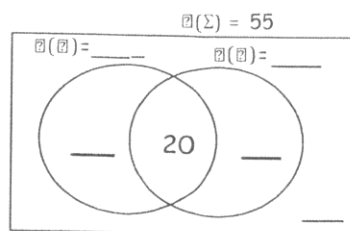


### SECTION B (60marks)

50. In a class of 55 pupils, 40 pupils like English (E), Y pupils like mathematics (M), 20 pupils like both subjects, and 10 like none of the two subjects.

(a) Complete the Venn diagram using the above data.

(6marks)



(b) Find the value of Y.

(2marks)

(c) How many pupils like mathematics only?

(2marks)

51. The perimeter of a rectangular field is 48m, if the length is twice the width. Find the area of the field. (2 marks)

52. (a) In a parents' meeting at a certain school the ratio of male to female parents was 3:5 respectively, if 30 female parents attended the meeting. How many male parents were in the meeting? (2 marks)

(b) If  $\frac{1}{3}$  of the male parents were below the age of 40. How many male parents were above the age of 40. (2 marks)

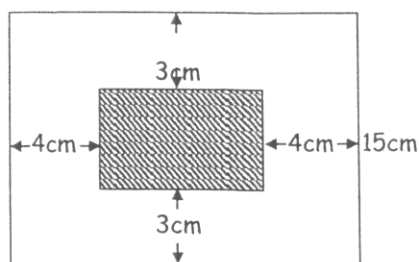
53. At a Forex Bureau, one US dollar costs Ug.sh.2800.

(a) How much Ugandan shillings will a tourist who has US dollars 600 get? (2 marks)

(b) If a businessman had Ug.sh. 630,000. How many US dollars will he get at the same exchange rate?  
(2 marks)

54. A teacher bought 8 books at sh.  $(p - 1500)$  each book and 2 pens at sh.  $(p + 1000)$  each pen. If the teacher spent 53,000 shillings altogether, how much money did he spend on the books?  
(2 marks)

55. Find the Area of the shaded part in the diagram below.  
(2 marks)



56. (a) Solve:  $2x - 1 = 2x + 5$   
(2 marks)

(b) Find the value of P in  $3(2+p) < 15$

(3 marks)

57. A driver of a bus covered a distance of 120km in  $1\frac{1}{3}$  hours.

(a) At what speed was he travelling?

(3 marks)

(b) What distance would he cover if he travelled for  $2\frac{1}{2}$  hours.

(3 marks)

58. Using a pair of compasses, a ruler and a pencil only construct a rhombus ABCD, where  $AB=5\text{cm}$ , angle  $ABC=60^\circ$  from your accurate construction, measure the length of the diagonal AC.

(3 marks)



59. Given that the circumference of a circle is 88m. calculate its area (Take  $\pi = \frac{22}{7}$ ) (3marks)

60. (a) The price of a hoe was increased by 10% to become 3520shillings. Calculate the original price of the hoe. (3marks)

(b) In how many years will shillings 60,000 amount to 72,000 at the simple interest rate of 10% per annum. (3marks)

Study the pie-chart below carefully and answer the questions.



(a) If a parent spends 240,000 on food. How much does he earn per month? (2 marks)

(b) What fraction of his salary does he spend in its lowest terms. (2 marks)

\*\*\*END\*\*\*