BLUE PRINT 2018 SET FIVE
PRIMARY SEVEN
<u>MATHEMATICS</u>
Time allowed: 2 hours 30 minutes

Name: _____

School: _____

Read the following instructions carefully:

1.   The paper has **two** sections: **A** and **B**

2.   Section **A** has 20 short questions (40 marks)

3.   Section **B** has 12 questions (60 marks)

4.   Answer **ALL** questions. All answers to both Sections A

and B must be written in the spaces provided.

5.   All answers must be written using a blue or black ball

point pen or ink. Diagrams should be drawn in pencil.

6.   Unnecessary alteration of work may lead to loss of marks.

7.   Any handwriting that cannot be easily read may lead to

loss of marks.

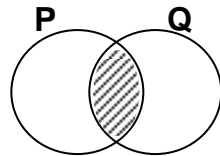8.   Do **not** fill anything in the boxes indicated for Examiner's

use only.

Turn over

SECTION A: (40 MARKS)

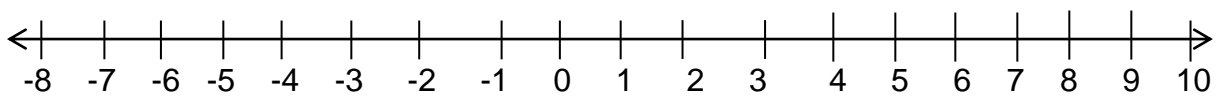1.   Work out: 15   x   10

2.   Describe the unshaded part in the venn diagram.

3.   Express XXXIX in Hindu Arabic numerals.

4.   Simplify: $\frac{2}{5}$ x $\frac{3}{4}$

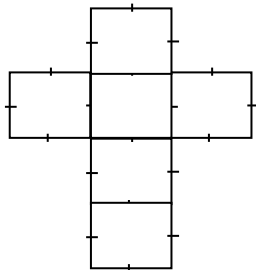5.   On the number line below, show 5   x   2

6. Find the next number in the sequence.
   0, 2, 5, 10, 17, _____

7. Divide: 3535 by 5

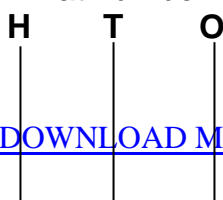8. There are 3 blue pens and 4 red pens in a packet. What is the probability of picking a red pen?

9. What solid figure is formed when the net below is folded carefully ?

10. Mr. Kalinda bought 3 cakes at sh. 5400. What is the cost of 5 similar cakes?

11. How many minutes are in 1.2 hrs?

12. Using a pencil, a ruler and a pair of compasses only, construct an angle of 60^0 and bisect it.

13. Find the Greatest Common Factor (GCF) of 12 and 18.

14. Find area of a circle whose radius is 10cm. (Use $\pi = 3.14$)

15. Find the mode of the following numbers.
    8, 7, 5, 9, 3, 7, 4, 7, 4

16. 4 men take 12 days to paint a house. How many men can paint the same house in 6 days when working at the same rate?
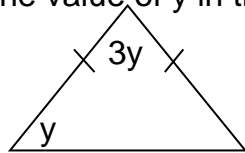
17. What number is shown on the abacus below?

    H   T   O

○

18.   Given that;   P = -4 and R = -5. Find the value of $\dfrac{PR}{R}$

19.   Set R = {a, b, c, d}, Find the number of subsets in set R.

20.   Find the value of y in the diagram below.

SECTION B: (60 Marks)

21.   Work out: **(3 marks)**

(a) $\dfrac{36 \ \times \ 0.6}{0.06}$

(b) $\dfrac{1}{2} \ \times \ \dfrac{2}{3} \ \div \ \dfrac{3}{4}$ **(2 marks)**
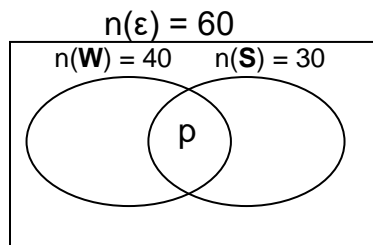
22. Amos went to the shop and bought the items in the table below.
    (a) Complete the table below. **(4 marks)**

Item	Quantity	Unit Price	Total amount
Rice	1 ½ kg	Sh. 3000 per kg	Sh. _____
Sugar	4 kg	Sh. _____ per kg	Sh. 14000
Milk	_____ litres	Sh. 600 per ½ litre	Sh. 3600
		Total	**Sh.** _____

(b) Find Amos' change if he went with sh. 25000. **(2 marks)**

23. At Kaliisa's graduation party, 60 guests were invited. 30 of them took water (**W**) and 40 took sodas (**S**), some took both drinks as shown in the venn diagram.
    (a) Complete the venn diagram below. **(2 marks)**

n(ε) = 60
n(**W**) = 40   n(**S**) = 30
p

(b) Find the value of p. **(2 marks)**

(c) How many guests took only one type of drink? **(2 marks)**

24. (a) Using a ruler, a pencil and a pair of compasses only, construct a rectangle WXYZ in which WX = 8cm, XY = 5cm **(4 marks)**

(b) Measure the length of line WY. **(1 mark)**
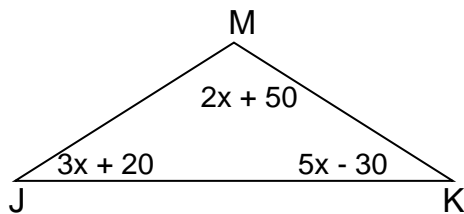
25. Farida scored the following marks in her mixed exercises;
3, 4, 6, 3, 10, 5, 6, 11, 9, 3

(a) Find her median mark. **(2 marks)**

(b) Find the mean mark. **(2 marks)**

(c) Find the range. **(2 marks)**

26. In the diagram below,
    (a) Find the value of x. **(2 marks)**

(b) Find the size of angle MJK **(2 marks)**

27. A car started on a journey at 8:00 a.m. It travelled at a speed of 90km/hr. What distance did it cover if it arrived at 12:00 noon? **(3 marks)**

28. (a) The school bursar is 19 years older than Peter. The sum of their ages is 45 years. How old is Peter? **(2 marks)**
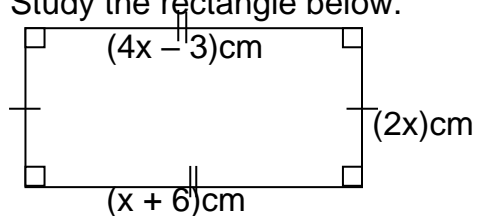
(b) Solve for y; $\dfrac{12}{y} + 2 = 6$

(2 marks)

29. (a) Calculate the simple interest on sh. 60000 kept for 3 months at a rate of 15% per annum. **(2 marks)**

(b) The amount of milk got from a cow was 200 litres a week but there is an increase in the ratio of 7:5. How much milk does the cow give?**(2 marks)**

30. Study the rectangle below.

(4x – 3)cm

(2x)cm

(x + 6)cm

(a) Find the value of x. **(2 marks)**

(b)   Find its area.   **(2 marks)**

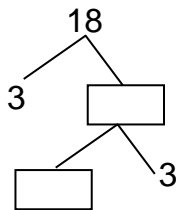(c)   Calculate its perimeter.   **(2 marks)**

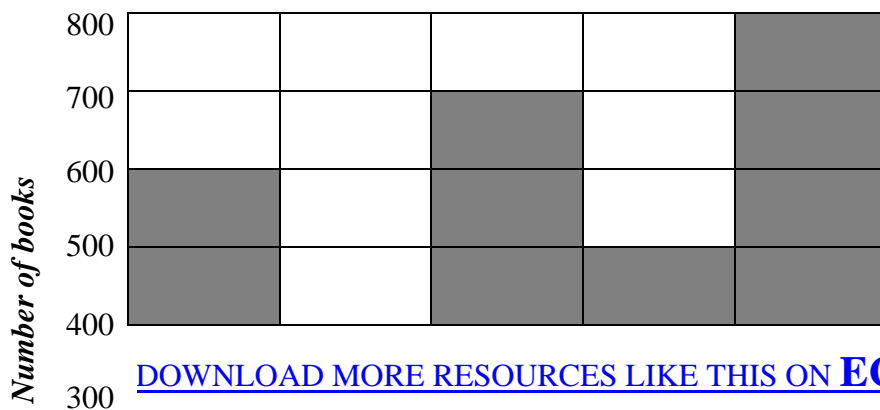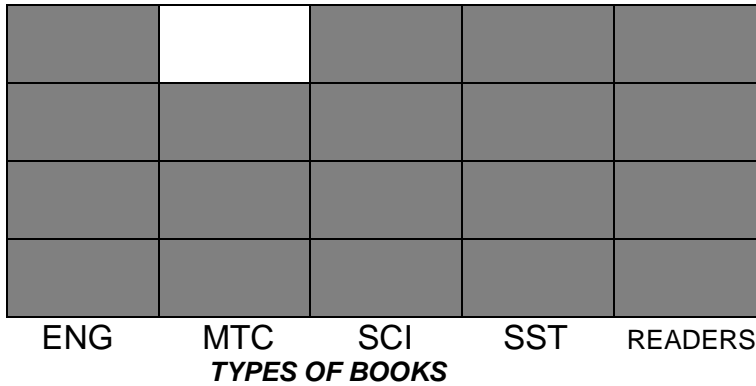31.   (a)   Expand 3463.4 using powers.   **(2 marks)**

       (b)   Write 0.00407 in standard form.   **(2 marks)**

       (c)   Fill in the missing numbers.   **(2 marks)**

18
3
3

32.   *The graph below shows the types of books in the school library of Bat Valley P/s.*

Number of books

800
700
600
500
400
300

ENG   MTC   SCI   SST   READERS

TYPES OF BOOKS

(a)   Which subject had the least number of books? **(1 mark)**

(b)   How many more books are needed to add to English books in order to get the same number of books as Readers? **(2 marks)**

(c)   What is the difference between the number of Science and Mathematics books? **(1 mark)**

(d)   What is the total number of books in the library? **(2 marks)**