සබරගමුව පළාත් අධ්‍යාපන දෙපාර්තමේන්තුව
சபரகமுவ மாகணக் க்ல்வித் திணைக்களம்
Sabaragamuwa Provincial Department of Education

පළමු වාර පරීක්ෂණය - 2018
முதலாம் தவணைப் பரீட்சை 2018
First Term Test - 2018

07 ශ්‍රේණිය
07 தரம்
Grade 07

ගණිතය - **I**
கணிதம் - **I**
Mathemetics - **I**

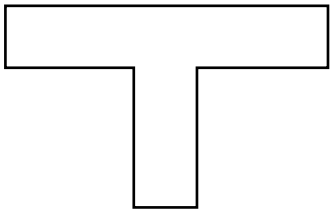
පැය දෙකයි
இரண்டுமணித்தியாலம்
Two hours

Name .....

Part I

* **Answer all the questions.**

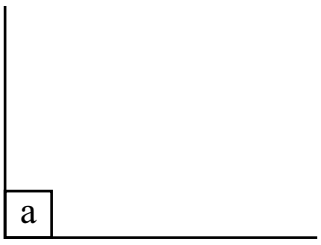
01. Write the number of axes of symmetry of the given figure.

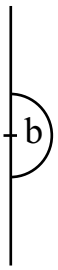


02. Simplify ; 3 x 4 + 8

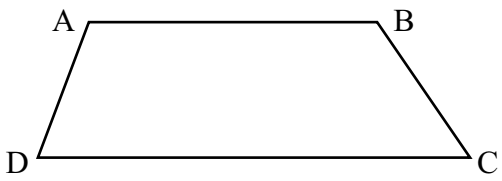
03. Find the digital root of 4536

04. Write the type of angle next to the corresponding figure.

(a) 

(b) 

05. Name the pair of parallel lines of the given figure



06. Write 60 as a product of prime factors.

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07. Indicate 250 days in months and days.

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08. Write 64 in index notation with 4 as the base.

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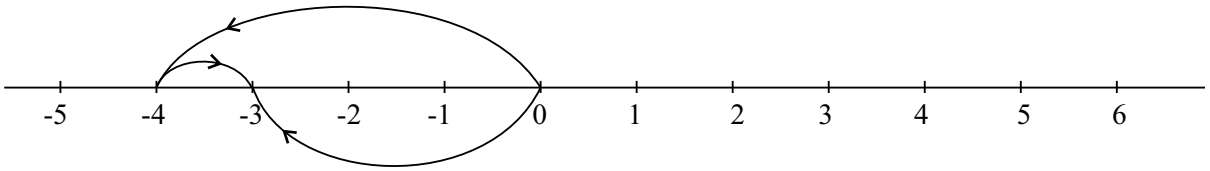
09. Fill in the blanks



..... + 1 = ...

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10. State whether the following expressions are true or false.

a) Angle between the edges of a cover of a book is a static angle.

b) The angle between the two blades of a pair of scissors changes when it is used for cutting is a dynamic angle.

---

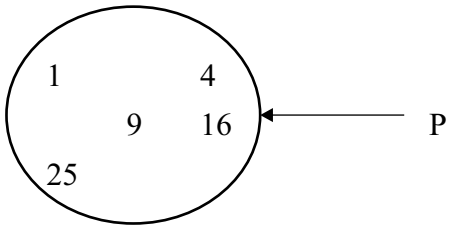
11. A is the set of letters of the word ' EXAMINATION ' . Write down the set A by writing its elements within curly brackets.

---

12. Find the H.C.F of 12 and 20

13. Any angle of magnitude greater than 18000 but less than 2600 is called as ..... angle.

14. Write down the set P represented by given venn diagram in items of a common property of its elements by which the elements can be clearly identified.

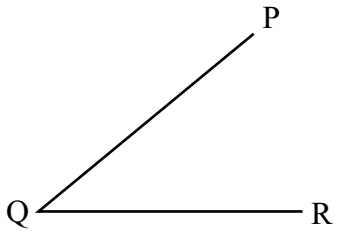


15. Select and write down the numbers which are divisible by 4 from the given numbers

196, 325 , 344 , 533

16. Expand and write the expression 5^2x^2 as a product

17. Write down the magnitude of the angle $\hat{PQR}$



18. Write down all the factors of 27.

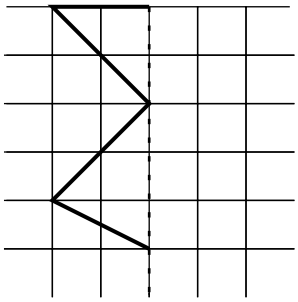
19. To which decade does AD 1961 belong ?

20. How many books are needed to distribute among 125 students as each student receive four books. ?

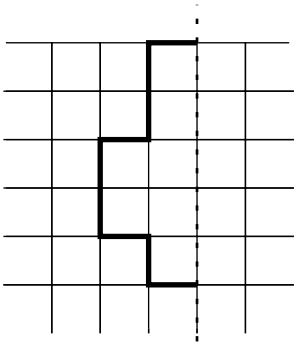
Part II

01. (i) Draw a bilaterally symmetric figure such that each figure has two axes of symmetry and mark the axes of symmetry of each of the figures.

(ii) Complete the given figures to obtain bilaterally symmetric figures in each case. (The dotted lines indicate the axis of symmetry)



(a)



(b)

(iii) Write two characteristics of a bilaterally symmetric plane figure.

(iv) Name four bilaterally symmetric plane figures.

02. (a) Simplify

(i) 5 + 2 x 5

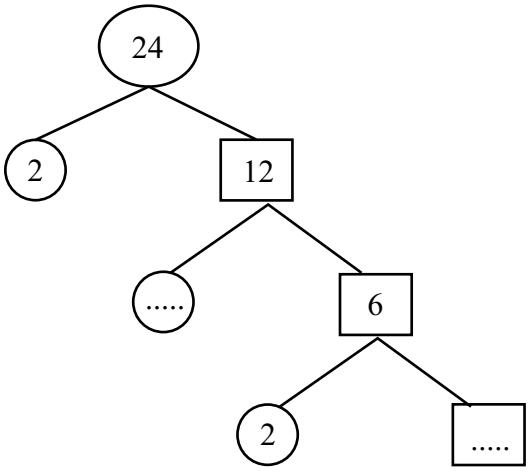
(ii) 12 ÷ 4 x 2

(iii) 18 ÷ 6 - 2

(iv) Nimal said " the answer of simplifying the expression " 5 + 3 x 2 is 16. Do you agree with that statement ? Give reasons.

(b) When Kamani make a call for her father in abroad, it costs Rs. 11 for the first minute and Rs. 5 per minute thereafter. Write down an expression for the cost of a 20 minutes long call. Simplify your expression.

03. (a) Complete the following diagram using your knowledge about factors.



(b) (i) Express 36, 48, 60 as a product of prime factors.

(ii) Using the answers of above (i) find the HCF of 36, 48 and 60

(iii) There is a pandol with blue, red and yellow bulbs light up at intervals of 2 , 3 , 4 seconds respectively. At the begining, all the bulbs light up together, How long does it take all the bulbs to light up together again ?

04. (a) Find the value

(i) (+3) + (-80) (ii) (-45) + (+10 - 3)

(b) A man started to paint a wall on 2017.04.22 and ended on 2017.05.20

(i) Calculate the number of days he spent to paint the wall.

(ii) If he was paid Rs. 1500 per day calculate the total amount he was paid for above work.

(iii) With that money, can be buy a motor cycle which costs Rs. 45 000 ? Give reasons.

05. (a) Fill in the blanks

(i) Angles of magnitude greater than 90^0 are called as ..... angles.

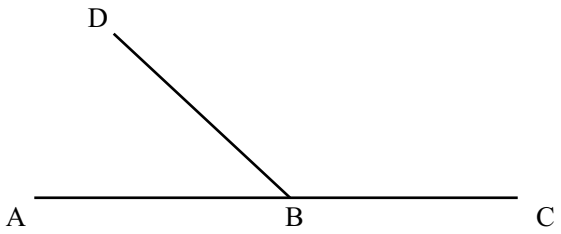
(ii) Angles of magnitude greater than 180^0 and less than 360^0 are called as ..... angles

(iii) Angles of magnitude 90^0 is called as ..... angles.

(iv) angles of magnitude greater than 90^0 and less than 180^0 are called as ..... angles.

(v) angles of magnitude 180^0 is called as ..... angles

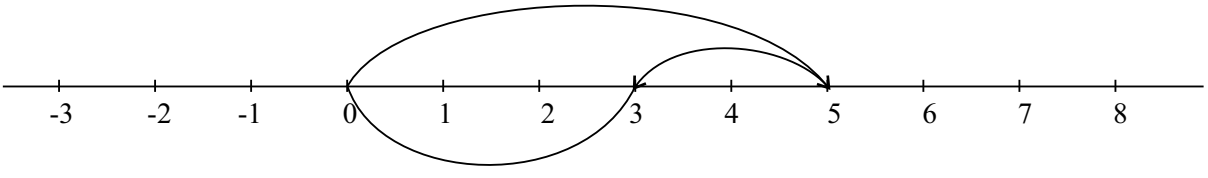
(b) Measure and write down the magnitude of angles $A\hat{B}C$ am $C\hat{B}D$



(c) Draw the angle $A\hat{B}C = 60^0$ using the protractor.

06. (a) (i) write 144 as a product of prime factors and in index notation.

(b) (i) Fill in the blanks using the given number line



(+5) + (.....) = (.....)

(ii) Find the value of (+5) + (-1) using the number line.

07. (a) Place a (√) next to each of the expressions which clearly define a set and a (x) next to those which do not clearly define a set.

(i) Students who obtained more than 40 marks for mathematics in last term test 2016 ( )

(ii) Talented singers ( )

(iii) Beautiful flowers ( )

(iv) Prime numbers between 10 and 20. ( )

(b) A = { Prime numbers between 0 and 10 }

(i) Express the set A by writing all the elements of the set within curly brackets.

(ii) Express set a by A Venn diagram

(iii) Express each of following sets by writing all the elements of each set within curly brackets.

(a) P = { Districts of the Sabaragamuwa Province }

(b) Q = { Square numbers between 0 and 10 }

1 st term Test

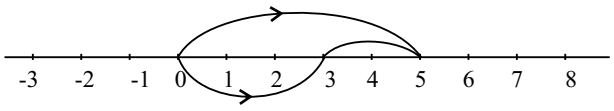
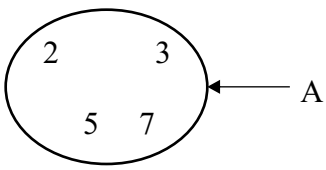
Grade 07

Marking Scheme - Part I

Question No.	Answers	Marks	Remarks
01.	01	02	
02.	20 ——— 2 12 + 8 ——— 1	02	
03.	4+5+3+6 or 18 ——— 1 9 ——— 2	02	
04.	right angle a ——— 1 Straight angle b ——— 1	02	
05.	AB// CD	02	
06.	2 x2 x3 x 5	02	
07.	08 months 10 days	02	
08.	4^3	02	
09.	(- 4) , (- 3)	02	
10.	a - true ——— 1 b - true ——— 1	02	
11.	a = { E, X, A, M, I, N, T, O }	02	
12.	H . C. F. - 4 02 12 = 2 x 2x 3 — 20s = 2 x 2x 5 — } 01	02	
13.	reflex	02	
14.	{ Square numbers from 1 fto 25 }	02	
15.	196 , 344 ——— 2 for 1 answer ——— 1	02	
16.	5 x5x x x x x	02	
17.	Correct answer	02	
18.	1 , 3 , 9 ,27 ——— 2 for correct 03 factors ——— 1	02	
19.	197	02	
20.	500 ——— 2 4 x 125 ——— 1	02	

Part II

Qu. No	Answers	marks	Remarks
01. (i)	for correct figure	02	
(ii)	for correct complete figure		
	(a) ——————— 2		
	(b) ——————— 2	04	
(iii)	* having two parts which coincide with each other when folded along a straight line	02	
	* Minimum number of axes of symmetry is one		
(iv)	equilateral triangle		
	Isosceles triangle		
	Square	04	
	rectangle		
	Circle (any 04 answers)		
02. (a)	(i) 15	02	
	(ii) 6	02	
	(iii) 1	02	
	(iv) Do not agree		
	5 + 3 x 2		
	5 + 6	02	
	11		
(b)	11 + 5 x 19 ——— 2		
	Rs. 11 + 95 ——— 1	04	
	Rs . 106 ——— 1		
03. (a)	2 ——— 1		
	3 ——— 1	02	
(b)	(i) 36 = 2 x 2x 3 x 3		
	48 = 2 x 2 x 2 x 2 x 3	03	
	60 = 2 x 2 x 3 x 5		
	(ii) 2 x 2 x 3 = 12	02	
	(iii) $2 \mid 2 , 3 , 4$		
	$1 , 3 , 2$	02	
	H.C.F. = 2 x 2x 3	01	
	after 12 seconds	02	

04.	(a)	(i)	(-11)	02
		(ii)	(+5.8)	02
	(b)	(i)	28 days	02
		(ii)	Rs . 1500 x 28 ——— 01	
			Rs . 42000 ——— 02	03
		(iii)	Can't	
			Rs . 42000 < Rs . 45 000	02
05.	(a)	(i)	acute angle	01
		(ii)	Reflex angle	01
		(iii)	Right angle	01
		(iv)	Obtuse angle	01
		(v)	Straight angle	01
	(b)	(i)	for correct values	04
		(ii)	for correct angle	02
			Name the angle	01
06.	(a)	(i)	2 x 2 x 2 x 2 x 3 x 3	01
			2^4 x 3^2	02
		(ii)	2 x 2 x3 x 3	01
			36	02
	(b)	(i)	(+5) + (-2) = (+3)	02
		(ii)		
			Represent by number line ——— 03	
			(+5) + (-1) = (+4) ——— 01	04
07.	(a)	(i)	√ (ii) x (iii) x (iv) √	04
	(b)	(i)	a = { 2 , 3 , 5 , 7 }	02
		(ii)		02
		(iii)	P = { Ratnapura , Kegalle }	02
			Q = { 1 , 4 , 9 }	02