තෙවන වාර පරීක්ෂණය - 2018 முதலாம் தவணைப் பரீட்சை 2018 ThirdTerm Test - 2018	07 ශ්‍රේණිය 07 தரம் **Grade 07**
ගණිතය - **I** கணிதம் - **I** Mathemetics - **I**	පැය දෙකයි இரண்டுமணித்தியாலம் **Two hours**

නම ....

Part I

* Answer all the questions

01. Write the number of axes of symmetry in given gigure.
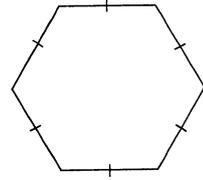
02. Simplify

    $(-5) + (+2)$

03. Expand

    $2^3 b^2$
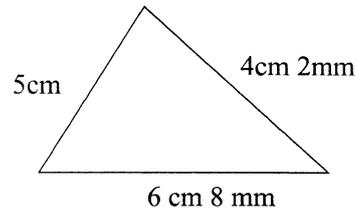
04. Express in simplest form

    $14 : 35$

05. Write down the mathematical operations in the order in which they appear

    $7 \times 2 - 8$

06. A   = { triangular numbers less than 10}

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

---

07. Find the perimeter of the given triangle.

5cm   4cm 2mm

6 cm 8 mm

---

08. If $a = 5$, find the value of $2a - 3$

---

09. Write down whether each of the events given below, is an event which definitely occures or an event which definitely does not occur

A heavy stone floating on water	
Appearance of the moon on a full moon Poya day	

---

10. If the volume of water of the given vessel is 50 cm^3 , Calculate the capacity of the vessel

---
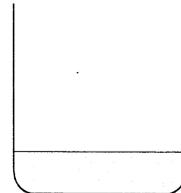
11. Denote $\dfrac{1}{4}$ as a percentage

---

12. Find H.C.F. of $8 , 12$ and 24 using the information given below

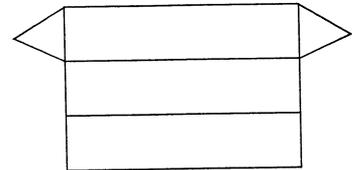8 $= 2 \times 2 \times 2$

12   $= 2 \times 2 \times 3$

24   $= 2 \times 2 \times 2 \times 3$

13. The mass of Susima is 32kg. His father's mass is twice of the mass of Susima's Calculate the total mass of both of them.

---

14. Write down the name of the solid which can made by using the given net
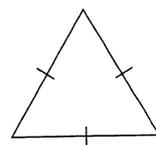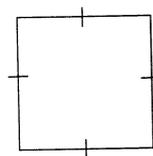
---

15. Simplify

$$2 \frac{3}{5} - 1 \frac{2}{5}$$

---

16. A bottle contains 1 l 50 ml of drink. If a person drinks 950 ml of drink from it, calculate the remaining amount of drink
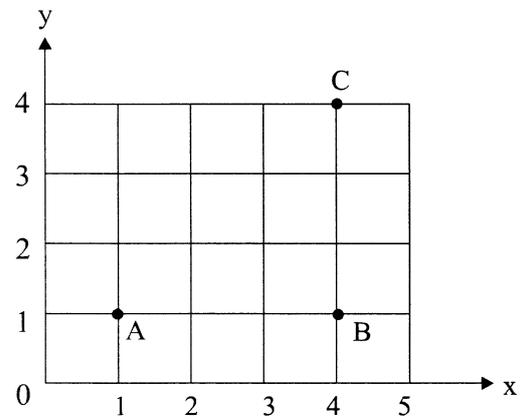
---

17. Simplify

12.4 ÷ 4

---

18. Write the type of the tessellation which can create using both of the given figures

19. Express as a ratio, the scale of a scale diagram of rectangular shaped hall. Where 10m is represented by 1 cm

20. Plot the point D such as ABCD .created a square. Write the co-ordinates of D

Part II

* **Answer 5 questions only**

01. (i) The biscuits in 02 packets each of contains 12 biscuits, are divided equally among 3 students. Write down an expression for the number of biscuits a single student receives. (2 mark)
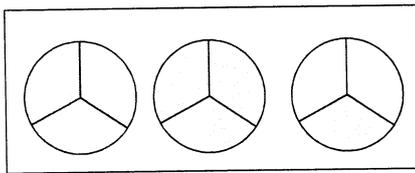
(ii) Simplify the above expression and find the number of biscuits one student receives (2 mark)

(iii)

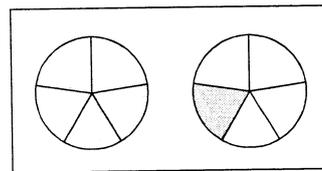| Naimal	Sunil
=12 + 8 x 5	12 + 8 x 5
= 100	= 52

According to the above table, name the students who simplify the expression correctly (2 mark)

(iv) Write down all the prime factors of 30 (2 mark)

(v) Red, Blue and green bulbs light up at intervals of 4 seconds, 6 seconds and 8 seconds respectively, If they light up together at 7.00 a.m, at what time will they light up together again? (4 mark)

---

02. (a) The following figures show the portions of pizza received by two persons
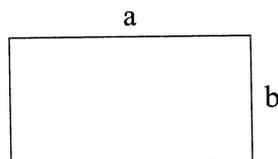

A   B

(i) Write the potions of pizza received by A and B separately. (2 mark)
(ii) Calculate the potions of pizza received by A than B (2 mark)

(b) (i) Build up an algebraic expression for the area of following figure. (2 mark)

(ii) If $a = 6$ cm and $b = 3$ cm, calculate the area of the above figure (2 mark)

(c) The length and breath of the base of a cuboid shaped tank are 1 m and 30 cm respectively
(i) If the height of the tank is 30 cm, calculate the volume of the tank in cm^3. (2 mark)

03. (a) The lengths of sides of triangle are x cm, (x+2) cm and (x+3) cm respectively.

   (i) If the perimeter of the triangle is P, Construct a formula for P

   (ii) If P = 17, find the each of the length of a side of the triangle.

   (b) (i) (a)   (b)   (c)
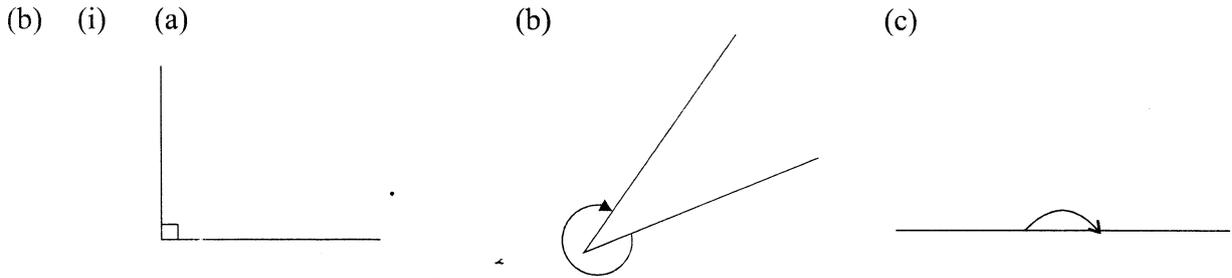
   Write down the types of angles represent in figures (a), (b) and (c)

   (ii) The two times of the magnitude of above one angle is equal to the magnitude of other angle, Write down the types of those angles

---

04.
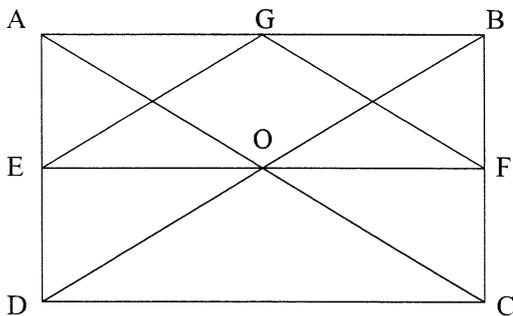
   (a) (i) Name 3 right angled triangles in above figure   (3 mark)

   (ii) Write the name of the pentagon which made by joining a triangle to EDCF rectangle

                                                                                   (3 mark)

   (b) (iii) Draw a straight line segment AB such that AB = 3 cm. Construct an equilateral triangle by taking one side as AB.   (3 mark)

   (iv) Construct a regular hexagon of side length 4 cm   (3 mark)

---

05. (a) (i) The length and breadth of a rectangular shaped hall 100 m and 40 m respectively. Select a suitable scale to draw the floor plan of the hall and write it as a ratio

   (ii)
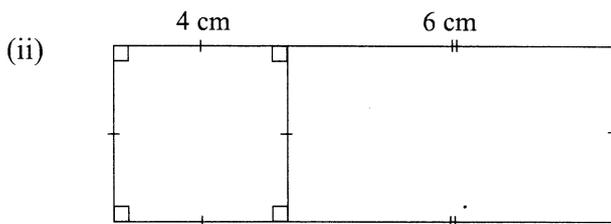
   (The scale is 1 : 200)

   The scale diagram of the Janith's house is shown above.

   a) Find the actual length and breadth of it   (2 mark)

   b) Find the actual area of it   (2 mark)