



**RAFFLES GIRLS' PRIMARY SCHOOL  
SEMESTRAL ASSESSMENT 1  
MATHEMATICS  
PRIMARY 4**

Name: \_\_\_\_\_ (      )

Math Teacher: \_\_\_\_\_

Form Class: P4 \_\_\_\_\_

Date: 14 May 2019

Duration: 1 h 45 min

<b>Your Score</b>	
<b>Section A (Out of 25 marks)</b>	
<b>Section B (Out of 40 marks)</b>	
<b>Section C (Out of 35 marks)</b>	
<b>Overall (Out of 100 marks)</b>	
<b>Parent's Signature</b>	

**INSTRUCTIONS TO CANDIDATES**

1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer **ALL** questions and show all working clearly.

## **SECTION A (25 marks)**

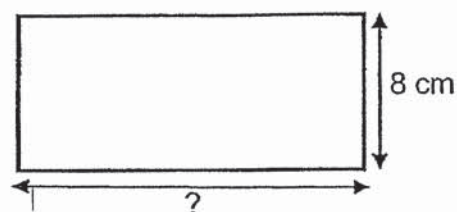
**Questions 1 to 5 carry 1 mark each. Questions 6 to 15 carry 2 marks each. For each question, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade your answer (1, 2, 3 or 4) on the OAS provided.**

1. What is the value of the digit '6' in 19 635.  
  - (1) 60
  - (2) 600
  - (3) 6000
  - (4) 60 000
  
2. Which of the following numbers is 48 000 when rounded to the nearest hundred?  
  - (1) 48 582
  - (2) 48 439
  - (3) 47 950
  - (4) 47 499
  
3. The product of 2041 and 6 is \_\_\_\_\_.  
  - (1) 12 046
  - (2) 12 186
  - (3) 12 246
  - (4) 13 806
  
4. Divide 1407 by 7.  
  - (1) 21
  - (2) 201
  - (3) 1101
  - (4) 2001

5. 8 m 8 cm = \_\_\_\_\_ cm

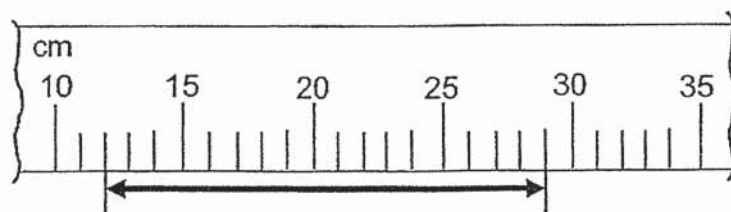
- (1) 88
- (2) 808
- (3) 880
- (4) 8008

6. The area of the rectangle is  $96 \text{ cm}^2$ . Find its length.



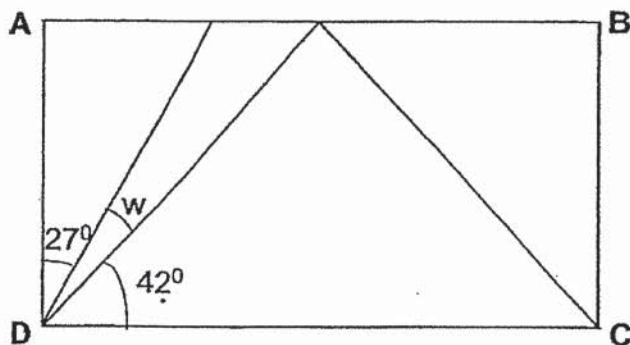
- (1) 12 cm
- (2) 16 cm
- (3) 24 cm
- (4) 40 cm

7. What is the length of the arrow as shown below?



- (1) 12 cm
- (2) 17 cm
- (3) 20 cm
- (4) 29 cm

8. In the figure, ABCD is a rectangle. Find  $\angle w$ .



- (1)  $15^\circ$
  - (2)  $18^\circ$
  - (3)  $21^\circ$
  - (4)  $69^\circ$
9. What is the missing number in the box?

$$\frac{3}{7} = \frac{\boxed{\phantom{000}}}{56}$$

- (1) 12
- (2) 24
- (3) 49
- (4) 52

10. Jamie had  $\frac{3}{4}$  m of ribbon. She used  $\frac{1}{8}$  m to tie a box.

What was the length of the ribbon left?

(1)  $\frac{1}{8}$  m

(2)  $\frac{5}{8}$  m

(3)  $\frac{6}{8}$  m

(4)  $\frac{7}{8}$  m

11. The perimeter of a rectangle is 32 cm. It is 8 times of its breadth.

What is the length of the rectangle?

(1) 4 cm

(2) 8 cm

(3) 12 cm

(4) 24 cm

12. The sum of all the common factors of 9 and 18 is \_\_\_\_\_.

(1) 3

(2) 10

(3) 12

(4) 13

13. There are \_\_\_\_\_ common multiples of 6 and 8 that are smaller than 50.

(1) 1

(2) 2

(3) 3

(4) 4

14. Mr Lim bought 568 boxes of oranges. Each box contained 28 oranges. How many oranges did he buy in all?

(1) 14 344

(2) 14 783

(3) 15 848

(4) 15 904

15. Ribbon X is  $\frac{2}{3}$  m long. It is  $\frac{1}{6}$  m longer than Ribbon Y. What is the length of Ribbon Y?

(1)  $\frac{5}{6}$  m

(2)  $\frac{4}{6}$  m

(3)  $\frac{3}{6}$  m

(4)  $\frac{1}{6}$  m

**SECTION B (40 marks)**

Questions 16 to 35 carry 2 marks each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated. All diagrams are not drawn to scale.

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16. Arrange the numbers in order. Begin with the greatest number.

36 062

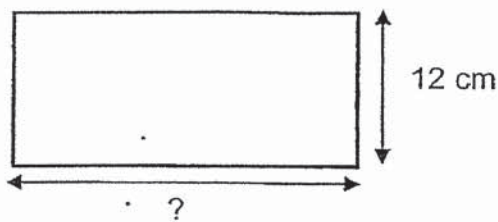
63 002

36 602

63 600

\_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_  
Greatest

17. The perimeter of a rectangle is 84 cm. Its breadth is 12 cm.  
Find the length of the rectangle.

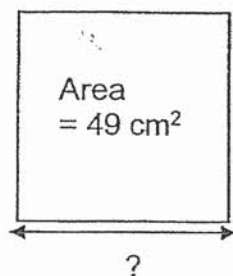


Ans: \_\_\_\_\_ cm

18. Find the sum of 700 and 109. Round the answer to its nearest ten.

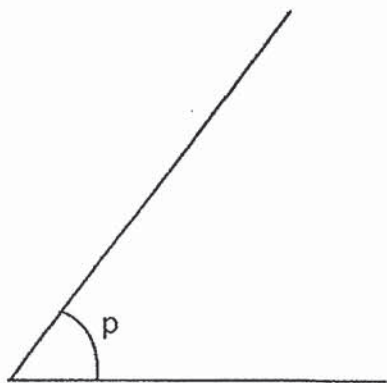
Ans: \_\_\_\_\_

19. What is the length of the square?



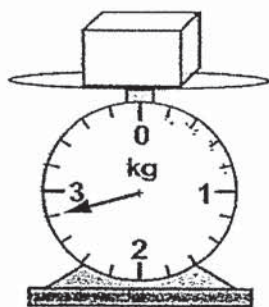
Ans: \_\_\_\_\_ cm

20. Measure  $\angle p$ .



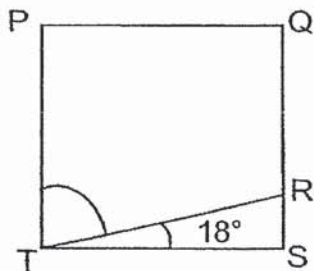
Ans: \_\_\_\_\_<sup>o</sup>

21. What is the mass of the box?



Ans: \_\_\_\_\_ kg \_\_\_\_\_ g

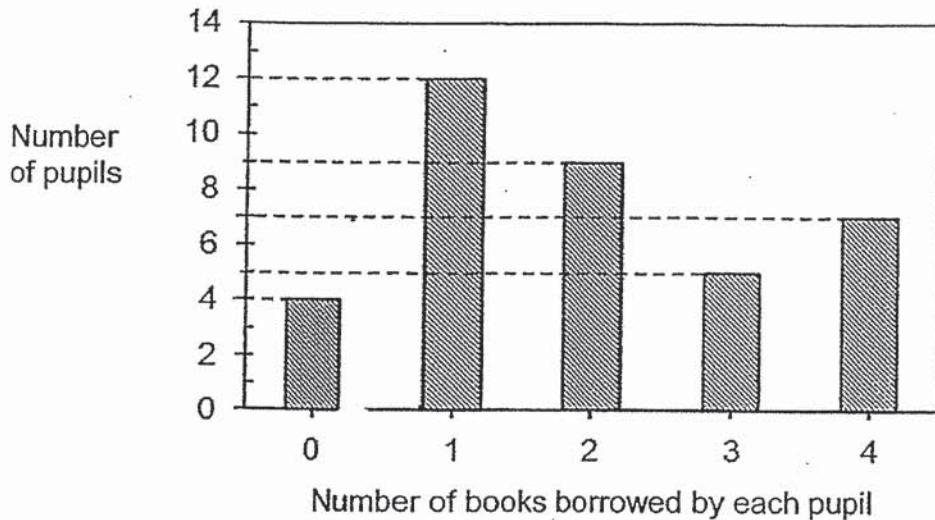
22. In the figure, PQST is a square and  $\angle RTS = 18^\circ$ . Find  $\angle PTR$ .



Ans: \_\_\_\_\_<sup>o</sup>



The bar graph shows the number of books borrowed by pupils in a class.  
Use the information and answer questions 23 and 24.



23. How many pupils were there in the class?

Ans: \_\_\_\_\_ pupils

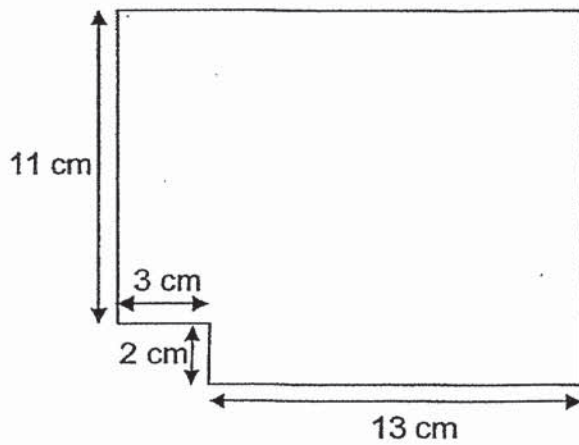
24. How many books were borrowed by the pupils in the class?

Ans: \_\_\_\_\_ books

25. Mrs Tan had 12 apples and 15 oranges. She wanted to put some apples and oranges in a box. In all the boxes, there were equal number of apples and equal number of oranges. What was the least number of boxes needed to put all the fruits and there were no leftovers?

Ans: \_\_\_\_\_ boxes

26. Find the perimeter of the figure.



Ans: \_\_\_\_\_ cm

27. Mrs Lee had \$6790. She distributed this amount of money equally to her 9 family members. What was the remaining amount of money after the distribution?

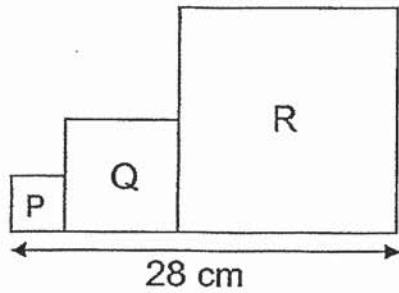
Ans\$ \_\_\_\_\_

28. Study the pattern below and find the missing number.

40 998 , 50 898 , 60 798 , \_\_\_\_\_ , 80 598 , 90 498

Ans: \_\_\_\_\_

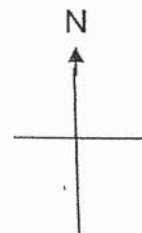
29. There are three squares, P, Q and R. The length of square R is twice the length of square Q. The length of square Q is twice the length of square P. Find the area of square P.



Ans: \_\_\_\_\_  $\text{cm}^2$

30. The square grid shows the plan of a school. The canteen is located at the East of the bookshop.

	Science Lab		Library
Bookshop		Canteen	
	Tinkering Courtyard		



In what direction is the Library from the Tinkering Courtyard?

Ans: \_\_\_\_\_

31. Each letter in the following sum represents a digit. Find the digits that are represented by these letters.

$$\begin{array}{r} \begin{array}{|c|} \hline A \\ \hline \end{array} \begin{array}{|c|} \hline 5 \\ \hline \end{array} \begin{array}{|c|} \hline A \\ \hline \end{array} \\ + \begin{array}{|c|} \hline B \\ \hline \end{array} \begin{array}{|c|} \hline B \\ \hline \end{array} \begin{array}{|c|} \hline 4 \\ \hline \end{array} \\ \hline 1 \quad 5 \quad 2 \quad 2 \end{array}$$

Ans: A = \_\_\_\_\_

Ans: B = \_\_\_\_\_

32. Arrange the fractions from the greatest to the smallest.

$$\frac{5}{6}, \frac{7}{12}, \frac{3}{4}$$

Ans: \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_  
greatest

33.  $\angle DFE = 110^\circ$ . Draw and mark the angle.



34. Both light bulbs A and B light up at the same time.  
After that, light bulb A lights up every 6 minutes and light bulb B lights up every 8 minutes. When will both light bulbs A and B next light up together?

Ans: \_\_\_\_\_ min

35. Mr Tan has more than 15 pens.  
If he bundles them in threes, he will have 2 pens left.  
If he bundles them in eights, he will have 3 pens left.  
What is the smallest possible number of pens he has?

Ans: \_\_\_\_\_

**SECTION C (35 marks)**

For questions 36 to 44, show your working clearly in the space provided below each question and write your answers with suitable units in the spaces provided. All diagrams are not drawn to scale. Marks will be awarded for relevant working. The number of marks available is shown in brackets [ ] at the end of each question or part-question.

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36. Mrs Wong used 1040 g of flour to bake a blueberry cheesecake. After baking 6 blueberry cheesecakes of similar masses, she had 2122 g of flour left.
- (a) How much flour did she use to bake 6 blueberry cheesecakes?
- (b) How much flour did she have at first?

Ans: (a) \_\_\_\_\_[1]

Ans: (b) \_\_\_\_\_[2]

37. Tom had 88 more stamps than Sally at first.  
Tom had 36 more stamps than Sally after he gave her some of his stamps.  
How many stamps did Tom give to Sally?

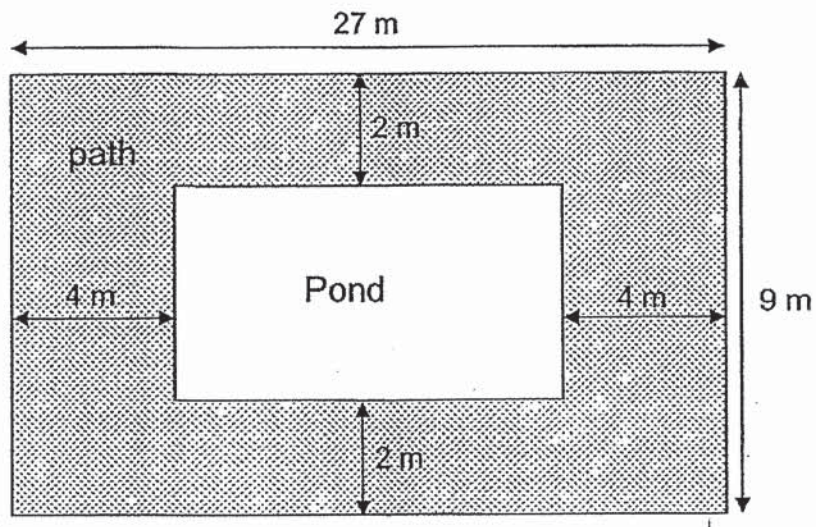
Ans: \_\_\_\_\_ [3]



38. Mandy used a total of 48 small and big boxes to contain 256 cupcakes. Each small box had 4 cupcakes and each big box had 8 cupcakes. How many big boxes did she use?

Ans: \_\_\_\_\_ [3]

39. Mr Wong had a rectangular plot of land measuring 27 m by 9 m. He decided to build a path around a pond. Find the area of the path.



Ans: \_\_\_\_\_ [4]

40. Alice and Betty had an equal number of stickers. After Alice bought another 222 stickers and Betty gave away 14 stickers, Alice had 3 times as many stickers as Betty. How many stickers did they have altogether at first?

Ans: \_\_\_\_\_[4]

41. Nick bought \$1085 worth of T-shirts at \$7 each. Some T-shirts had defects and needed to be thrown away. He sold the rest at \$9 each and collected \$1215. How many T-shirts did he throw away?

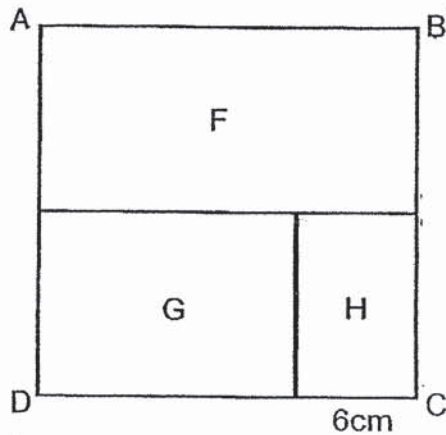
Ans: \_\_\_\_\_ [4]

42. Page A, B, C and D are four consecutive pages in a book.  
Page A and Page B are two facing pages in the book.  
Page C and Page D are the next two facing pages of the same book.  
The sum of these four pages is 326.  
What is the page number for Page D?

Ans: \_\_\_\_\_ [4]

43. ABCD is a square made up of 3 rectangles, F, G and H. The area of the square is twice the area of rectangle F. The perimeter of rectangle F is 96 cm. The perimeter of rectangle F is 52 cm more than the perimeter of rectangle H. The breadth of rectangle H is 6 cm.

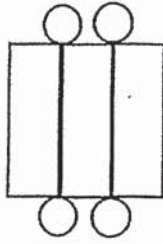
- (a) Find the perimeter of the square.  
(b) Find the area of the square.



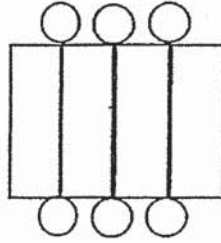
Ans: a) \_\_\_\_\_ [3]

b) \_\_\_\_\_ [2]

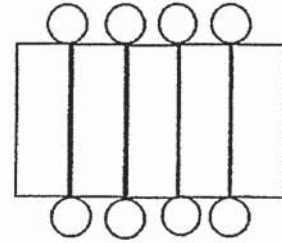
44. The pattern shows the arrangement of rectangles and circles.



Pattern 1



Pattern 2



Pattern 3

- (a) How many rectangles and circles are there in pattern 4? [2]  
 (b) How many rectangles and circles are there in pattern 15? [3]

Pattern	Number of Rectangles	Number of Circles
1	3	4
2	4	6
3	5	8
4	(ai) _____	(aii) _____
:	:	:
:	:	:
:	:	:
15	(bi) _____	(bii) _____





## ANSWER KEY

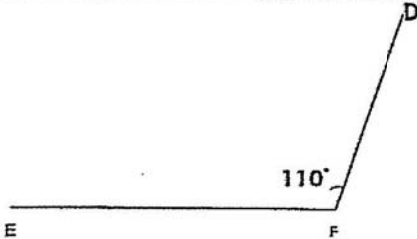
YEAR : 2019  
 LEVEL : PRIMARY 4  
 SCHOOL : RAFFLES GIRLS' PRIMARY SCHOOL  
 SUBJECT : MATHEMATICS  
 TERM : SA1

### PAPER ONE : BOOKLET A

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
2	3	3	2	2	1	2	3
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
2	2	3	4	2	4	3	

### PAPER ONE : BOOKLET B

Q16	63 600, 63 002, 36 602, 36 062
Q17	$12 + 12 = 24$ $84 - 24 = 60$ $60 \div 2 = 30\text{cm}$
Q18	$700 + 109 = 809$ Answer : 810
Q19	$\sqrt{49} = 7\text{cm}$
Q20	$53^\circ$
Q21	2 kg 800g
Q22	$\angle \text{PTR} = 90 - 18 = 72^\circ$
Q23	$4 + 12 + 9 + 5 + 7 = 37$ pupils
Q24	$12 + (9 \times 2) + (5 \times 3) + (7 \times 4)$ $= 12 + 18 + 15 + 28$ $= 73$ books
Q25	3 boxes
Q26	$11 + 3 + 13 + 13 + 16 = 58\text{cm}$
Q27	$\$6790 \div 9 = 754 \text{ R } 4$ Answer: \$4
Q28	70 698
Q29	$P : Q : R \rightarrow 1 : 2 : 4$ $28 \div 7 = 4\text{cm}$ $4 \times 4 = 16\text{cm}^2$
Q30	North-East
Q31	$A = 8$ $B = 6$

Q32	$\frac{5}{6}, \frac{3}{4}, \frac{7}{12}$
Q33	
Q34	<p>Bulb A <math>\rightarrow 6, 12, 18, 24</math></p> <p>Bulb B <math>\rightarrow 8, 16, 24</math></p> <p>Answer: 24min</p>
Q35	<p>Multiple of 3 <math>\rightarrow 18, 21, 24, 27, 30, 33</math></p> <p>+2 <math>\rightarrow 20, 23, 26, 29, 32, 35</math></p> <p>Multiple of 8 <math>\rightarrow 16, 24, 32, 40</math></p> <p>+3 <math>\rightarrow 19, 27, 35</math></p> <p>Answer <math>\rightarrow 35</math></p>
Q36	<p>(a) <math>1040 \times 6 = 6240g</math></p> <p>(b) <math>6240 + 2122 = 8362g</math></p>
Q37	<p><math>88 + 36 = 52</math></p> <p><math>52 \div 2 = 26</math></p>
Q38	<p>Assume all small box <math>\rightarrow 48 \times 4 = 192</math></p> <p>Surplus cupcakes <math>\rightarrow 256 - 192 = 64</math></p> <p>Diff btw big and small box <math>\rightarrow 8 - 4 = 4</math></p> <p>Ans <math>\rightarrow 64 \div 4 = 16</math> big boxes.</p>
Q39	<p>Total area <math>\rightarrow 27 \times 9 = 243m^2</math></p> <p>Breadth of pond <math>\rightarrow 27 - 4 - 4 = 19m</math></p> <p>Length of pond <math>\rightarrow 9 - 2 - 2 = 5m</math></p> <p>Total area of pond <math>= 19 \times 5 = 95m^2</math></p> <p>Area of path <math>\rightarrow 243 - 95 = 148m^2</math></p>
Q40	<p>A:B <math>\rightarrow 3:1</math></p> <p>2:U <math>\rightarrow 222 + 14 = 236</math></p> <p>1u <math>\rightarrow 236 \div 2 = 118</math> (Betty's sticker in the end)</p> <p>At first <math>\rightarrow 118 + 14 = 132</math></p> <p>Altogether <math>\rightarrow 132 + 132 = 264</math></p>
Q41	<p>Total bought <math>\rightarrow 1085 \div 7 = 155</math></p> <p>Total sold <math>\rightarrow 1215 \div 9 = 135</math></p> <p>Total thrown <math>\rightarrow 155 - 135 = 20</math></p>

Q42	$[A], [B], [C], [D] \rightarrow [A], [A] + 1, [A] + 2, [A] + 3$ $1 + 2 + 3 = 6$ $326 - 6 = 320$ $[A] \rightarrow 320 \div 4 = 80$ $[D] = 80 + 3$ Answer : 83
Q43	Perimeter H $\rightarrow 96 - 52 = 44\text{cm}$ Length of H $\rightarrow [44 - (2 \times 6)] \div 2 = 16\text{cm}$ Breath of F $\rightarrow 16$ Length of F $\rightarrow [96 - (2 \times 16)] \div 2 = 32\text{cm}$ Ans(a) $\rightarrow$ Perimter of square $\rightarrow 32 \times 4 = 128\text{cm}$ Ans(b) $\rightarrow 32 \times 32 = 1024\text{cm}^2$
Q44	(ai) 6 (aii) 10 (bi) 17 (bii) 32