

**Tao Nan School**  
**Primary 5 Mathematics End-of-Year Examination – 2010**

Name: \_\_\_\_\_ (    )    Date : 28 October 2010

Class : Primary 5 (    ;    )

Time : 8.00 a.m. - 8.50 a.m.

Parent's Signature : \_\_\_\_\_

Marks: \_\_\_\_\_ / **100**

Paper 1 comprises 2 booklets, A and B.

**MATHEMATICS**

**PAPER 1**

**(BOOKLET A)**

**INSTRUCTIONS TO CANDIDATE**

1. Write your name, class and Index No.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Shade your answers in the Optical Answer Sheet (OAS) provided.
6. You are **not** allowed to use a calculator.

Questions 1 to 10 carry 1 mark each. Questions 11 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 the oval (1, 2, 3 or 4) on the Optical  
Answer Sheet. (20 marks)

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1. In 9 165 287, the value of the digit 6 is \_\_\_\_\_.
  - (1) 6 000
  - (2) 60 000
  - (3) 600 000
  - (4) 6 000 000
  
2. In 6.125, there are \_\_\_\_\_ thousandths.
  - (1) 5
  - (2) 25
  - (3) 125
  - (4) 6 125
  
3. Which of the following, when rounded off to the nearest hundred, is 1000?
  - (1) 908
  - (2) 949
  - (3) 1 012
  - (4) 1 050
  
4. The perimeter of a square is 12 cm. Find its area.
  - (1) 9 cm<sup>2</sup>
  - (2) 12 cm<sup>2</sup>
  - (3) 3 cm<sup>2</sup>
  - (4) 144 cm<sup>2</sup>

5. After turning clockwise  $270^\circ$ , Lisa is facing East. Which direction was she facing at first?

- (1) East
- (2) North
- (3) South
- (4) West

6. At an electrical store, the original price for a television set is \$ 980. During a sale, Mrs Tan received a 10 % discount. How much did she pay for the television set?

- (1) 98
- (2) 882
- (3) 970
- (4) 1078

7.  $431 \times \underline{\hspace{2cm}} = 86,2 \times 1000$

- (1) 20
- (2) 2
- (3) 200
- (4) 2000

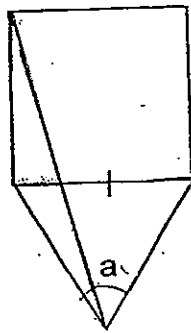
8. How many three-quarters are there in 6?

- (1) 6
- (2) 2
- (3) 8
- (4) 18

9. The average of 2 numbers is 257. The difference between them is 90.  
What is the smaller number?
- (1) 212
  - (2) 302
  - (3) 424
  - (4) 514
10. Robert has \$ 14 000 of savings in his bank account. The bank pays 2 % of interest for a year. How much interest does he earn after 1 year?
- (1) \$ 140
  - (2) \$ 280
  - (3) \$ 2 800
  - (4) \$ 14 280
11. What is the value of  $120 - (30 - 24) + 7 \times 8 \div 2$ ?
- (1) 84
  - (2) 85
  - (3) 86
  - (4) 142
12. The number of apples in a basket is  $\frac{3}{2}$  that of the pears. The ratio of the number of pears to the total number of fruits is \_\_\_\_\_.
- (1) 2 : 3
  - (2) 2 : 5
  - (3) 5 : 2
  - (4) 3 : 2

13. The figure below is made up of a square and an equilateral triangle.

Find  $\angle a$ .



(1)  $15^\circ$

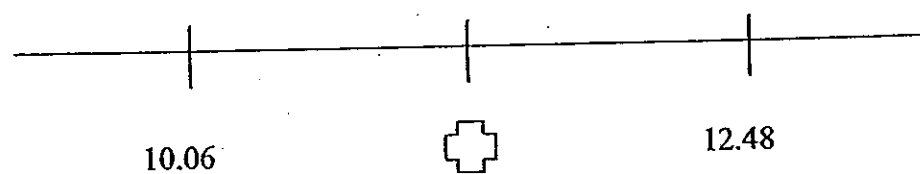
(2)  $45^\circ$

(3)  $60^\circ$

(4)  $75^\circ$

14.  $\oplus$  is the mid-point between 10.06 and 12.48 .

Find the value of  $\oplus$



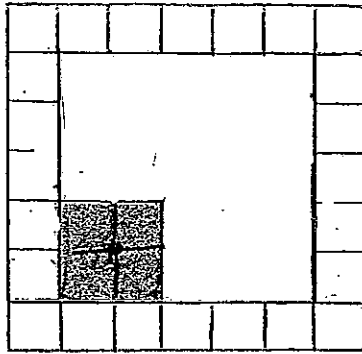
(1) 1.21

(2) 2.42

(3) 11.27

(4) 13.69

15. The figure below is made up of squares. What fraction of the whole figure is Square P?

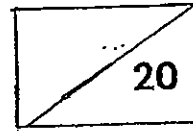


- (1)  $\frac{1}{45}$   
(2)  $\frac{1}{49}$   
(3)  $\frac{4}{45}$   
(4)  $\frac{4}{49}$

Name: \_\_\_\_\_ ( )

Class : Primary 5 ( )

Parent's Signature : \_\_\_\_\_



**MATHEMATICS**  
**PAPER 1**  
**(BOOKLET B)**

**INSTRUCTIONS TO CANDIDATE**

1. Write your name, class and Index No.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Write your answers in this booklet.
6. You are **not** allowed to use a calculator.

Questions **16** to **25** carry 1 mark each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (10 marks)

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16. Write nine million, three hundred and sixty-nine in numerals.

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

17. Find the product of 3,406 and 20.

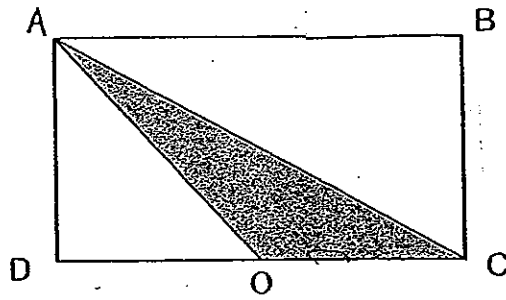
Ans: \_\_\_\_\_

18. Find the value of  $\frac{3}{8} \div 6$ . Give your answer in the simplest form.

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



19. ABCD is a rectangle measuring 48 cm by 38 cm.  $CO = OD$ .  
Find the area of Triangle AOC.

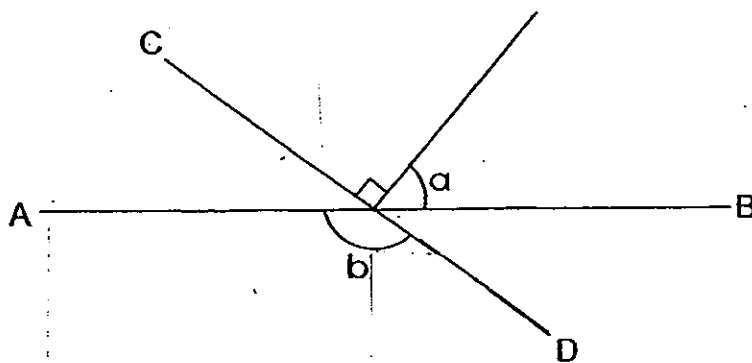


Ans: \_\_\_\_\_  $\text{cm}^2$

20. A container measures 12 cm by 18 cm by 4 cm. What is the maximum number of cubes of side 3 cm can be put into the container?

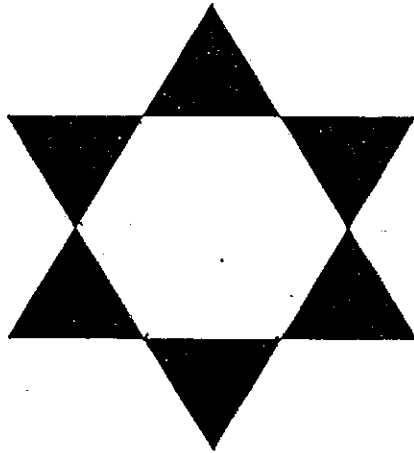
Ans: \_\_\_\_\_

21. In the figure below, AB and CD are straight lines.  $\angle b = 156^\circ$ . Find  $\angle a$ .



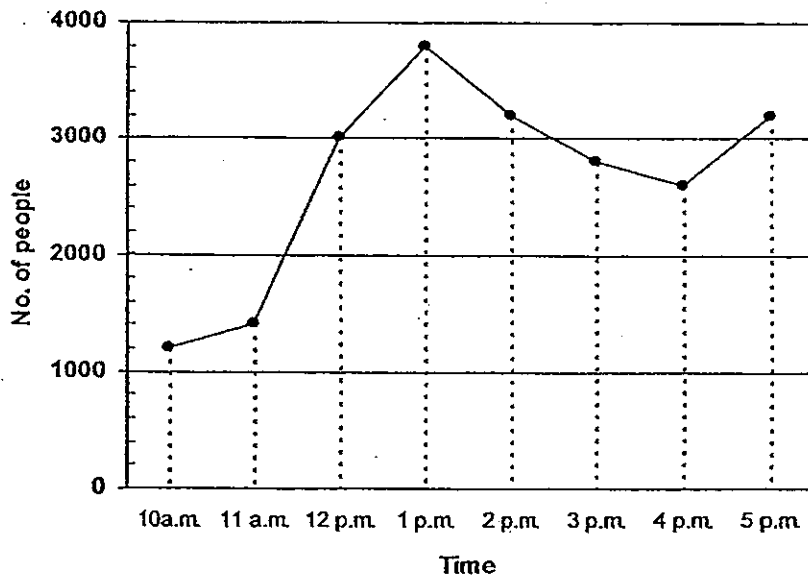
Ans: \_\_\_\_\_  $^\circ$

22. The figure is made up of a regular hexagon and 6 similar equilateral triangles. What percentage of the figure is shaded ?



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

Look at the graph below. It shows the number of people in a shopping centre. Study the graph carefully and answer question 23.



23. The greatest increase in the number of people at the shopping centre was between \_\_\_\_\_ and \_\_\_\_\_ ?

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

24. Study the following diagram. X is a whole number.  
What is the value of X?

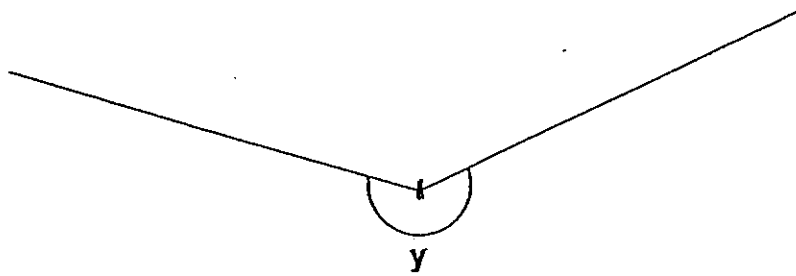
2	4
6	12

6	12
18	36

9	18
27	X

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

25. Measure  $\angle y$  using a protractor.



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

Questions 26 to 30 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (10 marks)

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26. 2 years ago, Lydia's father is twice as old as her. Their total age now is 52 years. How old is Lydia now?

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

27. Find the missing number.

$$16 : 24 : \underline{\quad} = 28 : 42 : 70$$

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

28. How many digits are needed to form the numbers from 1 to 99 ?

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

29.  $\frac{1}{2}$  of a number is bigger than  $\frac{1}{3}$  of the number by 6. What is the number?

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

30. 1550 students went to the Youth Olympic Games' Opening Ceremony. How many buses were needed if each bus could carry only 45 students ?

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

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END OF PAPER

**Tao Nan School**  
**Primary 5 Mathematics End-of-Year Examination – 2010**

Name: \_\_\_\_\_ (    )    Date : 28<sup>th</sup> October 2010

Class : Primary 5 (    )

Time : 10.00 a.m. - 11.40 a.m.

Parent's Signature : \_\_\_\_\_

Marks        : \_\_\_\_\_ / **60**

**MATHEMATICS**  
**PAPER 2**

**INSTRUCTIONS TO CANDIDATE**

1. Write your name, class and Index No.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Show your working clearly as marks are awarded for correct working.
6. You are allowed to use a calculator.

Questions 1 to 5 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

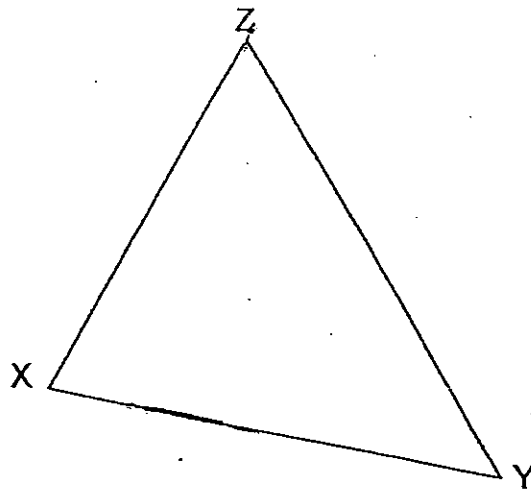
(10 marks)

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1. Alice made some cookies. She gave  $\frac{2}{3}$  of the cookies to her mother and  $\frac{1}{2}$  of the remainder to her brother. What fraction of the cookies were given to her brother?

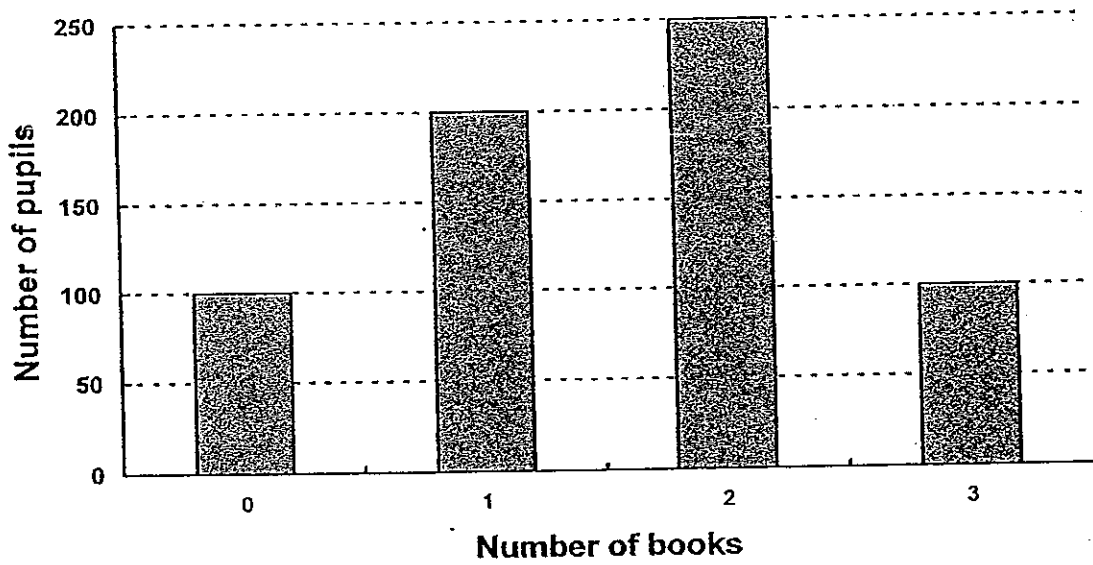
Ans: \_\_\_\_\_

2. On the triangle below, draw the height, ZA, if the base is XY. Measure ZA.



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

The graph below shows the number of books each pupil read in a week in ABC School.

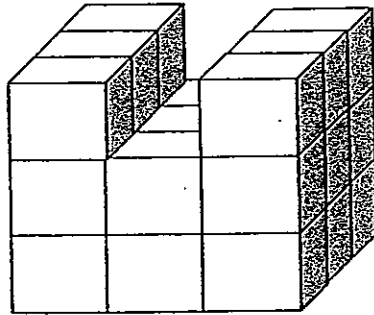


3. What is the average number of books read? Round off your answer to the nearest whole number.

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



4. A solid was made up of 27 cubes.  
3 cubes in the top middle row were then removed and the remaining solid was painted green. How many cubes had only one painted face ?



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

5. Mrs Tan was paid \$0.40 for every parcel she wrapped. She received an additional \$2 for every 10 parcels that she wrapped. How many parcels did Mrs Tan have to wrap in order to earn \$48 ?

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

For questions 6 to 18, show your working clearly in the space provided for each question and write your answers in the spaces provided.  
The number of marks available is shown in brackets [ ] at the end of each question or part-question. (50 marks)

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6. 23 similar packets of washing powder and a bottle of shampoo cost \$139.35. If one packet of washing powder cost \$5.10, find the cost of the bottle of shampoo.

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

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7. Bala spent  $\frac{1}{2}$  of his weekly allowance on food and  $\frac{1}{8}$  of it on transport. If he spent \$66 more on food than on transport, how much was his weekly allowance?

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

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8. The table shows the parking charges at a carpark.

7 a.m. to 12 noon	\$0.50 per $\frac{1}{2}$ h or part thereof
12 noon to 9 p.m.	\$1.50 per hour or part thereof

Mr Lee parked his car at the carpark from 8.00 a.m. to 2.30 p.m. on the same day. If he had only 50-cent parking coupons, how many pieces of the coupons would he have to use for the parking charges ?

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

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9. Philip, Chin Huat and Suri bought some gifts for their YOG friends.

Philip paid  $\frac{2}{5}$  of the cost of the gifts and the rest was paid by Chin Huat and Suri. The ratio of the amount paid by Chin Huat to the amount paid by Suri was 7 : 8 . Philip paid \$20 more than Suri. What was the cost of the gifts ?

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

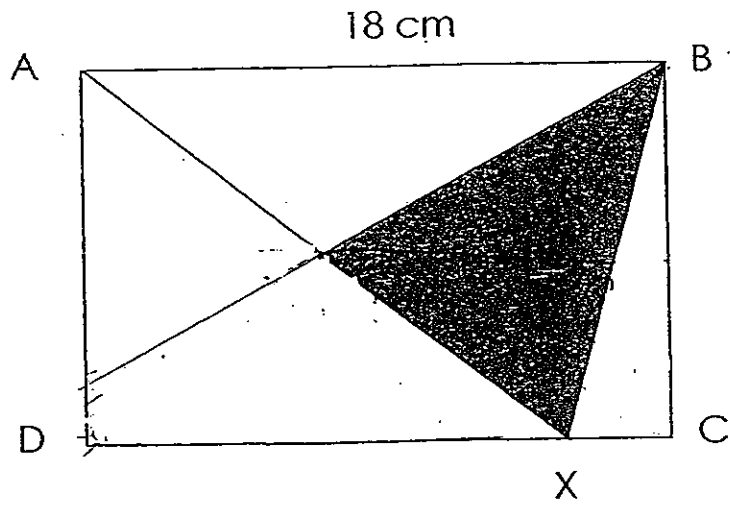
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10. 5 students sat for a Science test. 3 students scored an average of 85 marks. The total score of the other 2 students was 165. What was the average score of the 5 students ?

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

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11.

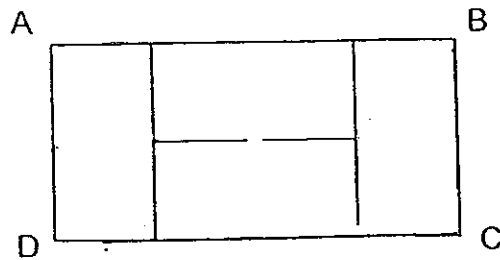


Rectangle ABCD has a perimeter of 56 cm. If the area of  $\triangle ABX$  is  $42 \text{ cm}^2$ , find the area of  $\triangle BXY$ .

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

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12. The figure below is made up of 4 identical rectangles.  
The length of AB is 12 cm. Find the area of the figure.



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

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13. A tank measures 65 m by 70 m by 2.5 m. It contains  $2275 \text{ m}^3$  of water. After adding in more water, the height of the water level becomes 0.1 m from the top of the tank. How much water was added?

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

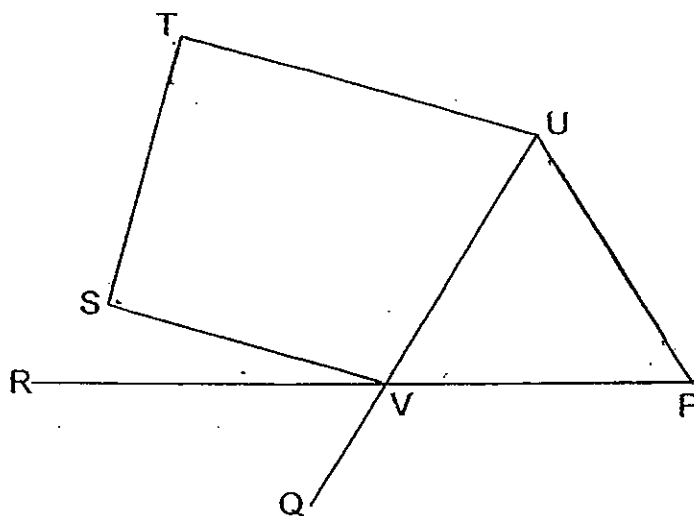
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14. PR and QU are straight lines. STUV is a trapezium and UVP is an equilateral triangle.  $\angle TUP$  is  $135^\circ$ . (Figure is not drawn to scale).

Find

(a)  $\angle RVQ$

(b)  $\angle SVR$



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

(b) \_\_\_\_\_ [3]

15. Ali has some 50-cent coins and Martin has some \$1 coins. Ali has 49 more coins than Martin but has \$4.50 less than him. How much money do they have altogether ?

Ans: \_\_\_\_\_ [5]



16. There were some people travelling on a bus. At the first station,  $\frac{1}{4}$  of the passengers alighted and 24 passengers boarded the bus. At the next station,  $\frac{1}{6}$  of the passengers in the bus alighted and 10 passengers boarded the bus. There were 55 passengers in the bus then. How many passengers were there at first ?

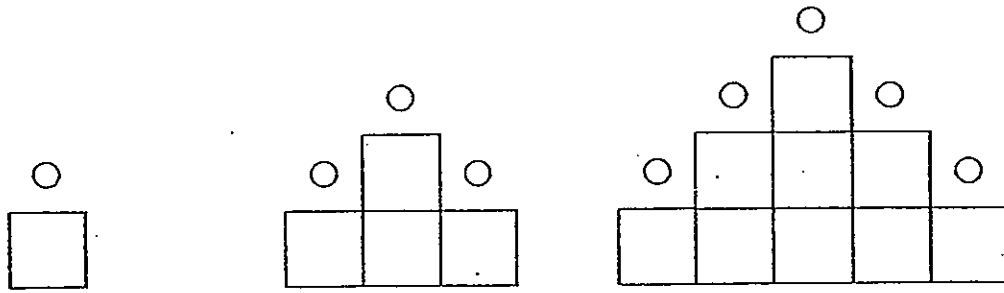
Ans: \_\_\_\_\_ [5]

17. Maya saved 15% of her salary. 20% of the remainder was spent on transport and the rest on food and rental in equal portions. If she spent \$ 471.20 more on rental than she saved, how much was her salary?

Ans: \_\_\_\_\_ [5]

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18. Study the following pattern carefully and answer the questions that follow.

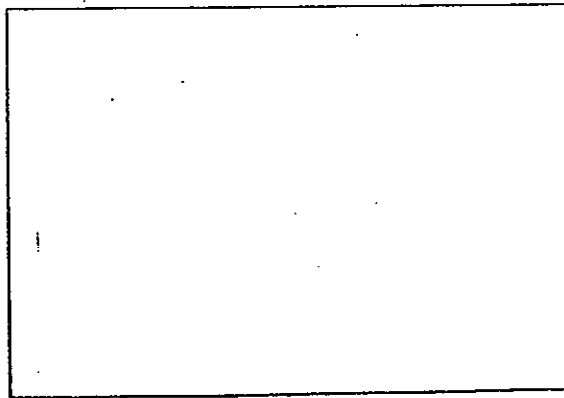


Pattern 1

Pattern 2

Pattern 3

( a ) Draw Pattern 4 in the space below.



( b ) How many squares are there in Pattern 63 ?

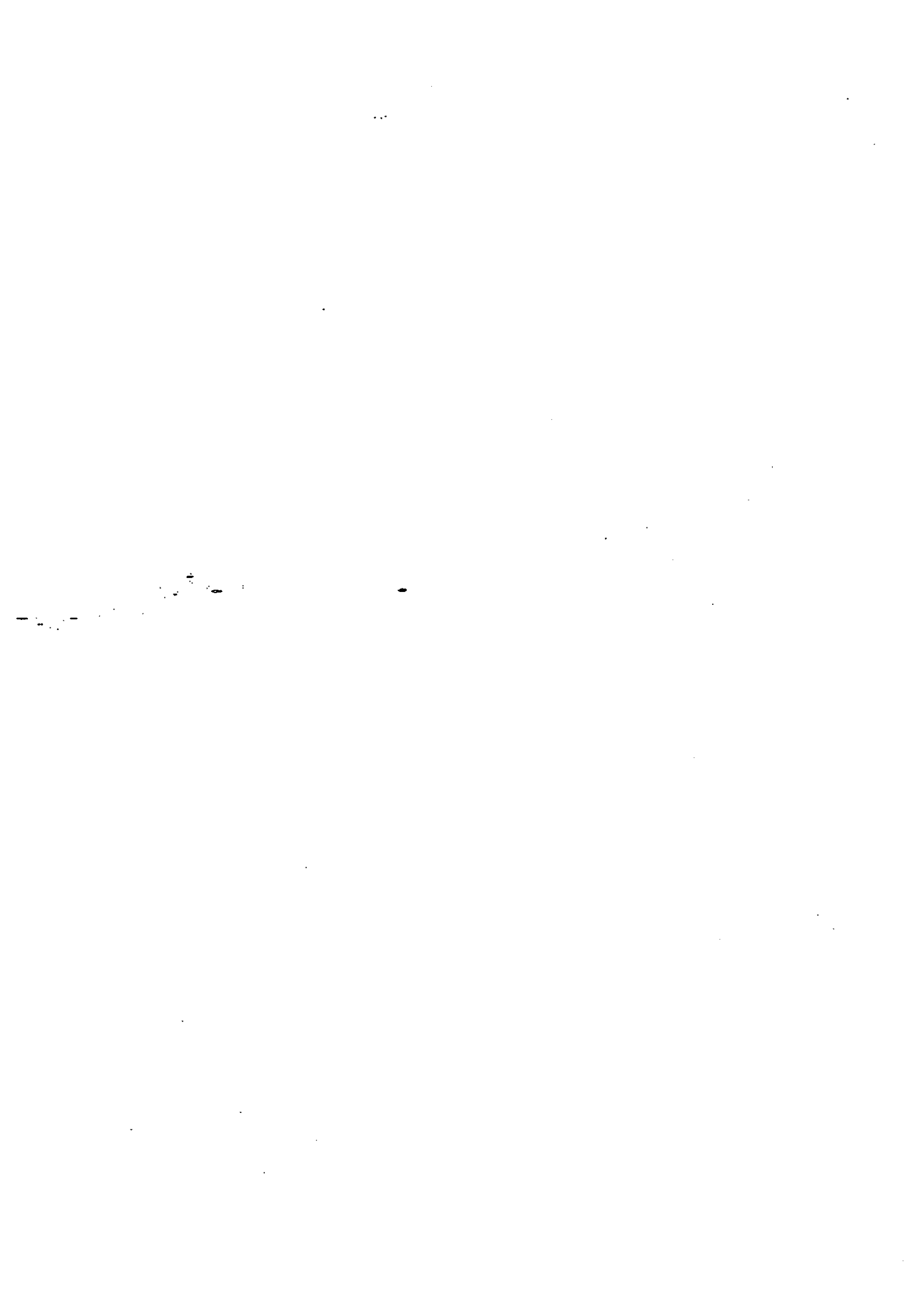
( c ) How many more squares than circles are there in Pattern 12 ?

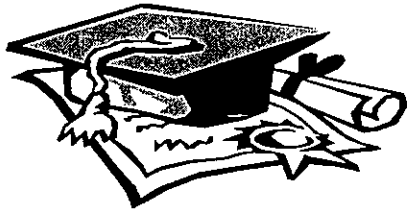
Ans: ( a ) \_\_\_\_\_ [1]

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

( c ) \_\_\_\_\_ [2]

END OF PAPER



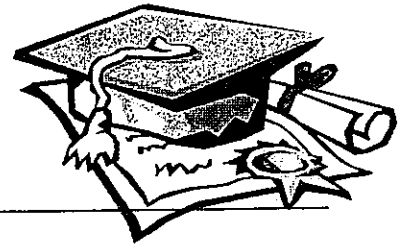


# ANSWER SHEET

## EXAM PAPER 2010

SCHOOL : TAO NAN PRIMARY  
SUBJECT : PRIMARY 5 MATHEMATICS

TERM : SA2



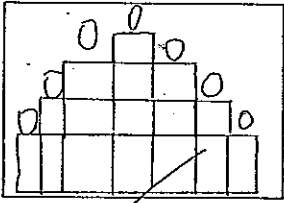
Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
2	4	3	1	3	2	3	3	1	3	4	2	2	3	4

- 16) 9000369    17) 68.12    18) 1/16    19) 456    20) 24    21) 66    22) 50%  
23) 11a.m and 12p.m    24) 54    25) 222    26) 18    27) 40    28) 189  
29) 36    30) 35

### Paper 2

- 1) 1/6    2) 5cm    3) 2    4) 4    5) 80

<p>6)</p> $\begin{aligned} \$5.10 \times 23 &= \$117.30 \\ \$139.35 - \$117.30 &= \$22.05 \end{aligned}$ <p>The bottle of shampoo cost \$22.05.</p>	<p>7)</p> $\begin{aligned} 4 - 1 &= 3 \\ \$66 / 3 &= \$22 \\ \$22 \times 8 &= \$176 \end{aligned}$ <p>His weekly allowance is \$176.</p>
<p>8)</p> $\begin{aligned} 8\text{a.m to } 12 \text{ noon} &\rightarrow \$4 \\ 12 \text{ noon to } 2.30 \text{ p.m} &\rightarrow 3 \times \$1.50 \\ &= \$4.50 \\ \$4 + \$4.50 &= \$8.50 \\ \$8.50 / \$0.50 &= 17 \end{aligned}$ <p>He would have to use 17 coupons.</p>	<p>9)</p> $\begin{aligned} (15 / 3) \times 2 &= 10 \\ 10 - 8 &= 2 \\ \$20 / 2 &= \$10 \\ \$10 \times 15 &= \$150 \\ \$10 \times 10 &= \$100 \\ \$150 + \$100 &= \$250 \end{aligned}$ <p>The gifts cost \$250</p>

<p>10)</p> $85 \times 3 = 255$ $255 + 165 = 420$ $420 / 5 = 84$ <p>The average score is 84.</p>	<p>11)</p> $(56 - 18 - 18) / 2 = 10$ $\frac{1}{2} \times 18 \times 10 = 90$ $90 - 42 = 48 \text{ cm}^2$ <p>The area is 48 cm<sub>2</sub></p>
<p>12)</p> $12 / 3 = 4$ $3 \times 2 = 6$ $6 \times 12 = 72$ <p>The area is 72 cm<sup>2</sup>.</p>	<p>13)</p> $65 \times 70 \times (2.5 - 0.1) = 10920$ $10920 - 2275 = 8645 \text{ m}^3$ <p>8645m<sup>3</sup> of water is added.</p>
<p>14)</p> $135^\circ - 60^\circ = 75^\circ$ $180^\circ - 75^\circ = 105^\circ$ $180^\circ - 15^\circ - 105^\circ = 106^\circ$ <p>Angle RVQ is 60°</p> $180^\circ - 105^\circ - 60^\circ = 15^\circ$ <p>Angle SVR is 15°</p>	<p>15)</p> $49 \times 50 \text{ cents} = \$24.50$ $\$24.50 + \$4.50 = \$29$ $\$29 / \$0.50 = 58$ $58 \times \$1 = \$58$ $(58 + 49) \times \$0.50 = \$53.50$ $\$58 + \$53.50 = \$111.50$ <p>They have \$111.50 altogether.</p>
<p>16)</p> $55 - 10 = 45$ $45 / 5 = 9$ $45 + 9 = 54$ $54 - 24 = 30$ $30 / 3 = 10$ $10 \times 4 = 40$ <p>There were 40 people in the bus at first.</p>	<p>17)</p> $100\% - 15\% = 85\%$ $(85\% / 100\%) \times 20 = 17\%$ $85\% - 17\% = 68\%$ $68\% / 2 = 34\%$ $34\% - 15\% = 19\%$ $\$471.20 / 19 = \$24.80$ $\$24.80 \times 100 = \$2480$ <p>Her salary was \$ 2480.</p>
<p>18a)</p> 	<p>18b)</p> $63 \times 63 = 3969$ <p>There are 3969 squares in pattern 63.</p>

**18c)**

$$12 \times 12 = 144$$

$$1 + (2 \times 11) = 23$$

$$144 - 23 = 121$$

**There are 121 more squares than circles in pattern 121.**

