SEMESTRAL ASSESSMENT 2

PRIMARY 4 MATHEMATICS

25 OCTOBER 2016

BOOKLET A

20 questions

40 marks

Total time for Booklets A and B: 1 h 45 min

NAME : _____ **(** **)**

CLASS : PRIMARY 4 _____

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.

FOLLOW ALL INSTRUCTIONS CAREFULLY.

ANSWER ALL QUESTIONS.

Section A (20 x 2 = 40 marks)

For each question, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade the correct oval (1, 2, 3 or 4) on the Optical Answer Sheet.

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1. Which of the following numbers when rounded off to the nearest hundred becomes 81 500?

   (1) 81 444

   (2) 81 496

   (3) 81 550

   (4) 81 594

2. Which of the following is a multiple of both 4 and 6?

   (1) 8

   (2) 2

   (3) 12

   (4) 18

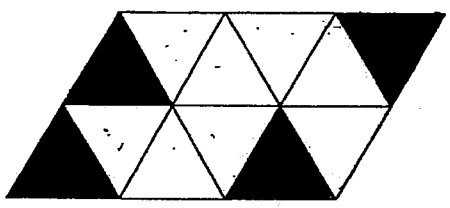
3. The figure shown is made up of identical triangles. What fraction of the figure is shaded?

   (1) $\frac{4}{8}$

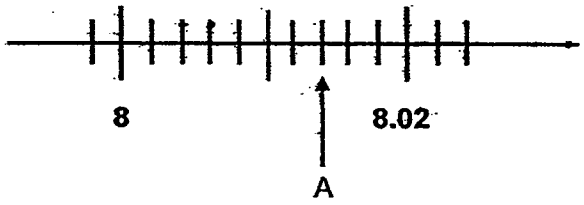
   (2) $\frac{4}{12}$

   (3) $\frac{8}{12}$

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



4. Which of the following decimals is represented by letter A in the number line?



(1) 8.007

(2) 8.012

(3) 8.014

(4) 8.017

5. Which one of the following fractions is not in its simplest form?

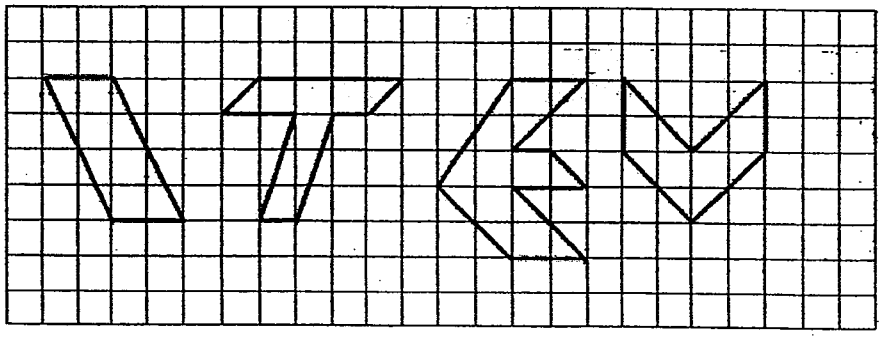
(1) $\frac{4}{12}$

(2) $\frac{3}{5}$

(3) $\frac{4}{9}$

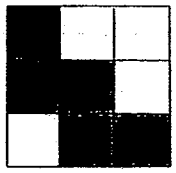
(4) $\frac{9}{20}$

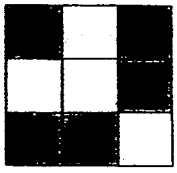
6. Which one of the following figures in the square grid below has both parallel lines and perpendicular lines?

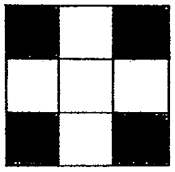


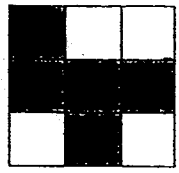
(1) (2) (3) (4)

7. Which figure below does not have a line of symmetry?

(1) 

(2) 

(3) 

(4) 

8. Mrs Tan went to the market with $98.40. After buying 6 kg of prawns, she had $24.60 left. How much did each kilogram of prawns cost?

(1) $4.10

(2) $12.30

(3) $16.40

(4) $73.80

9. Round off each number in the table to the nearest tens. Which two numbers will give an estimated sum of 4600?

A	B	C	D
2093	2195	2306	2404

(1) A and B

(2) A and C

(3) B and C

(4) B and D

10. Jane had 600 beads at first. She used $\frac{7}{12}$ of the beads to make a necklace and $\frac{1}{3}$ of the beads to make a bracelet. How many beads had Jane left?

(1) 50
(2) 200
(3) 350
(4) 550

11. 78 000 students watched a concert in a stadium. There were 8800 more girls than boys. How many girls were there in the stadium?

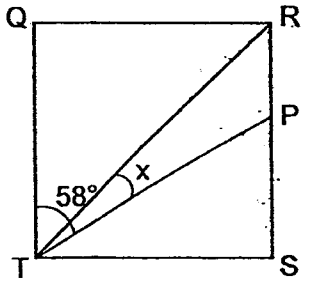
(1) 30 200
(2) 34 600
(3) 43 400
(4) 47 800

12. Six years ago, John's age was a multiple of 5. His age now is a multiple of 3. How old is John now?

(1) 21
(2) 24
(3) 27
(4) 30

13. Figure QRST is a square. RT is a straight line and $\angle QTP = 58°$. Find $\angle x$.

(1) 13°
(2) 16°
(3) 29°
(4) 32°



14. The opening hours of a restaurant is shown below.

Opening hours

Monday to Friday
1100 to 1400
1800 to 2130

Saturday and Sunday
1100 – 1430
1745 – 2200

How long is the restaurant open each day during the weekend?

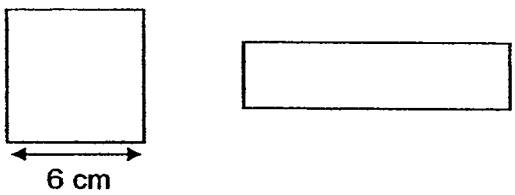
(1) 3 h 30 min

(2) 6 h 30 min

(3) 7 h 45 min

(4) 9 h 45 min

15. The rectangle and square below have the same perimeter. The breadth of the rectangle is half the side of the square. What is the length of the rectangle?



(1) 3 cm

(2) 9 cm

(3) 12 cm

(4) 15 cm

16. Mary has 4 times as much money as her brother. They have a total of $62. How much must Mary give her brother so that they have an equal amount of money in the end?

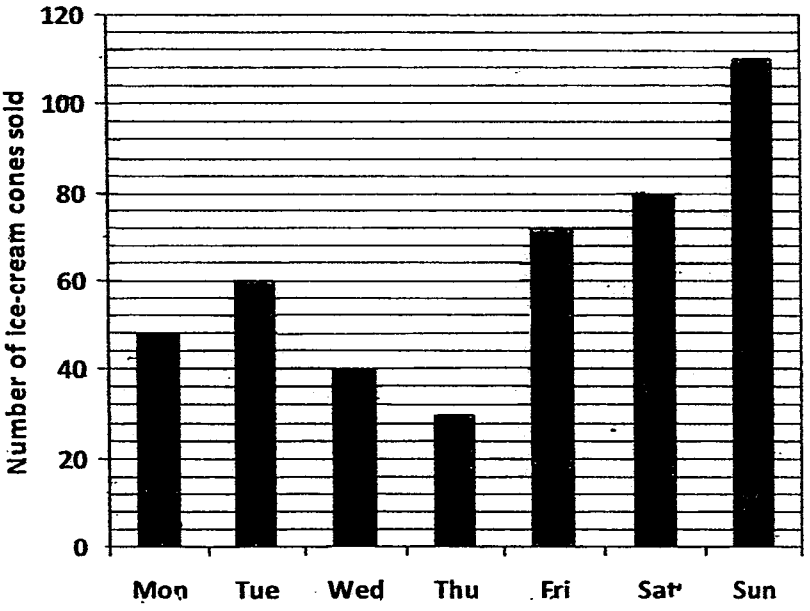
(1) $12.40

(2) $15.50

(3) $18.60

(4) $31.00

The graph below shows the number of ice-cream cones sold at a store. Study the graph carefully and answer Questions 17 and 18.



17. On which two days were a total of 120 ice-cream cones sold?

(1) Mon and Fri

(2) Tue and Sat

(3) Wed and Sun

(4) Thu and Fri

18. Each ice-cream cone was sold for $2. Find the total amount of money collected from the sale of ice-cream cones on weekdays.

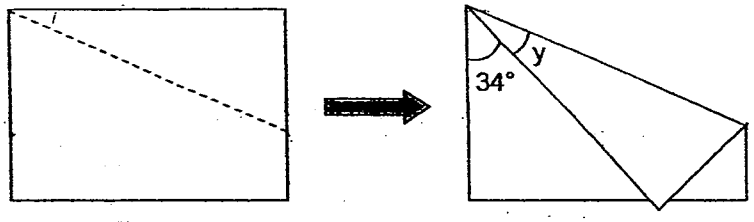
(1) $250

(2) $255

(3) $500

(4) $510

19. A rectangular piece of paper is folded along the dotted line as shown below.



What is the size of $\angle y$?

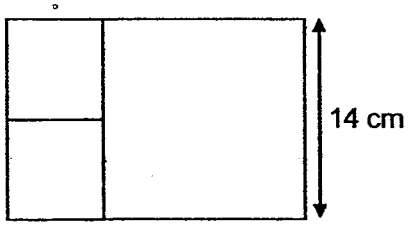
(1) 22°

(2) 28°

(3) 34°

(4) 56°

20. The figure below is made up of 3 squares. What is the area of the figure?



(1) 70 cm^2

(2) 98 cm^2

(3) 112 cm^2

(4) 294 cm^2

End of Section A

Go on to Booklet B

MARIS STELLA HIGH SCHOOL (PRIMARY)
SEMESTRAL ASSESSMENT 2
PRIMARY 4 MATHEMATICS
25 OCTOBER 2016
BOOKLET B

25 questions

60 marks

Total time for Booklets A and B: 1 h 45 min

NAME : _____

CLASS : PRIMARY 4 _____

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD

FOLLOW ALL INSTRUCTIONS CAREFULLY.

ANSWER ALL QUESTIONS.

MARKS OBTAINED :

BOOKLET A: _____ / 40

BOOKLET B: _____ / 60

TOTAL : _____ / 100

Parent's Signature: _____

Section B (20 x 2 = 40 marks)

Show your working clearly in the spaces below each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

21. Write forty thousand and fourteen in figures.

Answer: _____

Do not write in this space.

22. Two factors of 27 are 1 and 27. What are the other two factors of 27?

Answer: _____ and _____

23. Write the missing number in the number pattern below.

2369 , _____ , 4409 , 5429 , 6449

Answer: _____

24. $\frac{5}{6} = \frac{10}{\square}$

What is the missing number in the box?

Answer: _____

SCORE

(Go on to the next page)

25. Find the value of $1 + \frac{1}{2} - \frac{1}{6}$. Express the answer in its simplest form.

Do not write in this space.

Answer: _____

26. Arrange the following numbers in order from the greatest to the smallest.

5.032, 5.320, 5.203

Answer: _____, _____, _____
(greatest) (smallest)

27. Find the value of 5.76 x 8.

Answer: _____

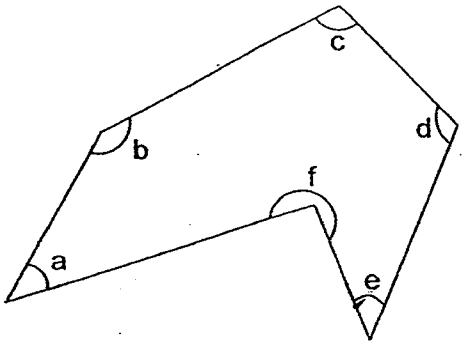
28. Express $\frac{18}{1000}$ as a decimal.

Answer: _____

SCORE

(Go on to the next page)

29. In the figure below, name the two angles that are smaller than 90°.



Answer: _____ and _____

Do not write in this space.

30. Mrs Goh mixed 6.84 kg of bread flour with 5.16 kg of oat flour. She then repacked the flour into packets of 500 g. How many packets did she use to contain all the flour she mixed?

Answer: _____

31. Sally had some cookies. She gave $\frac{7}{9}$ of them to Susie and 12 cookies to her neighbour. She then had 16 cookies left. How many cookies did Sally have at first?

Answer: _____

SCORE

(Go on to the next page)

32. A bag costs 3 times as much as a storybook. The difference in the cost of the two items is $16.40. How much does the bag cost?

Do not write in this space.

Answer: $ _____

33. The total mass of 3 tables is the same as the total mass of 4 chairs. The mass of a table is 2 kg heavier than a chair. Find the mass of a table.

Answer: _____ kg

34. A square of side 4 cm is cut out from a rectangular paper. The square is put back to the paper to form Figure 2. Find the perimeter of Figure 2.

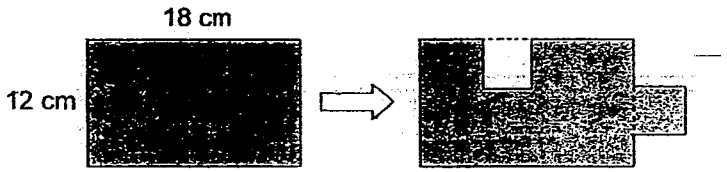


Figure 1 Figure 2

Answer: _____ cm

SCORE

(Go on to the next page)

Study the diagram below and answer Questions 35 and 36.

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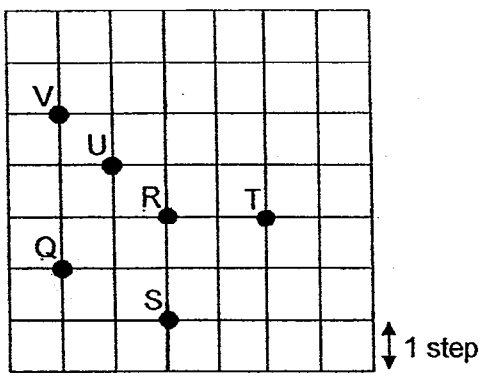


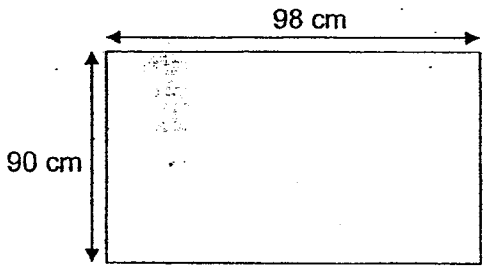
35. Kelly is standing at point U and facing North. At which point will she be facing if she makes a 225° turn anti-clockwise?

Answer: Point _____

36. Jonathan is standing at point R facing North. He moves around in the diagram above following the instructions below:
    a. Walk 3 steps to the North.
    b. Turn to the East and walk 2 steps forward.
    c. Make a 90° turn clockwise and walk 2 steps forward.

    Put a cross **(X)** in the diagram above to show where Jonathan is standing in the end.

37. At most how many pieces of square paper, each of side 6 cm long, can be cut from a large piece of rectangular paper measuring 98 cm by 90 cm?



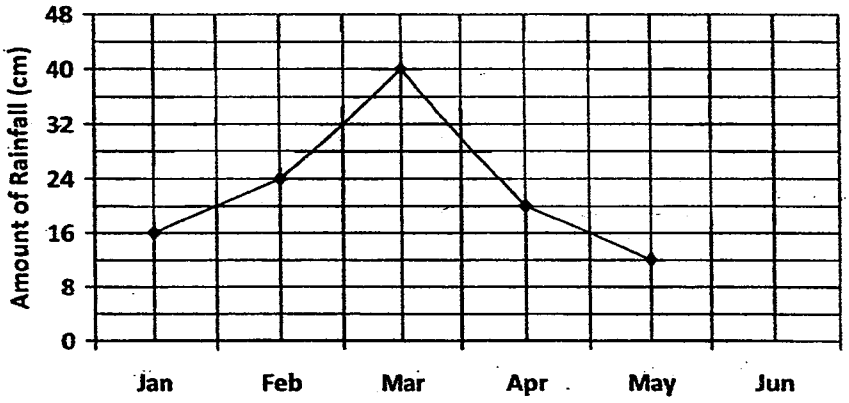
Answer: _____

SCORE

(Go on to the next page)

The line graph shows the amount of rainfall collected from January to June.

Use the information below to answer Questions 38 – 40.



38. A total of 140 cm of rainfall was collected from January to June. How much rain was collected in the month of June?

Answer: _____ cm

39. In which months were the amount of rainfall collected less than 20 cm?

Answer: _____

40. During which one-month period was the decrease in the amount of rainfall collected the greatest?

Answer: Between _____ and _____

Do not write in this space.

SCORE

(Go on to the next page)

Section C (5 x 4 = 20 marks)

Work out the answers for each of the following questions. All workings must be shown.

41. Tim has \$150. He spent \$26.80 on food and \$13.60 more on transport than on food. He then spent the rest of his money on 6 books.

(a) How much did Tim spend on food and transport altogether?

(b) How much did Tim spend on each book?

Do not write in this space.

Answer: (a)_____ [2]

(b)_____ [2]

SCORE

(Go on to the next page)

42. There were 48 litres of water in Tank A and Tank B altogether.
Robin poured 5 litres of water from Tank B into Tank A.
After that, he poured 7 litres of water from Tank A to Tank B.
Both tanks have the same amount of water in the end.

Do not write in this space.

(a) How many litres of water were there in Tank A at first?

(b) Tank A was $\frac{1}{3}$ filled with water at first. What is the capacity of Tank A?
Give your answer in litres.

Answer: (a)_____ [3]

(b)_____ [1]

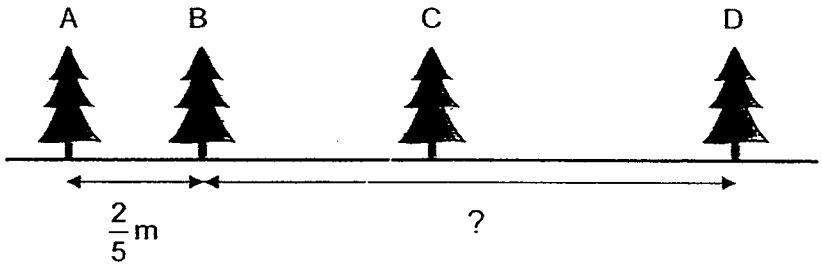
SCORE

(Go on to the next page)

43. Farmer Joe plants four trees A, B, C and D along a straight line as shown below.

Trees A and B are $\frac{2}{5}$ m apart. The distance between Trees B and C is twice the distance between Trees A and B. The distance between Trees C and D is $\frac{1}{3}$ m more than the distance between Trees B and C.

What is the distance between Trees B and D?



Answer: _____ [4]

Do not write in this space.

SCORE

(Go on to the next page)

44. James had $105 and his brother had $23 at first.
Mother gave each of them an equal amount of money.
After that, James has 3 times as much money as his brother.
How much did Mother give each of them?

Do not write in this space.

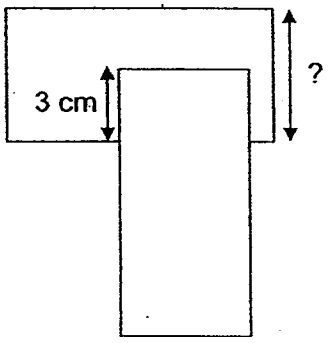
Answer: _____ [4]

SCORE
(Go on to the next page)

45. Two identical rectangles partially overlapped each other as shown below. The area of each rectangle is 128 cm^2. Its length is twice its breadth.

(a) Find the breadth of a rectangle.

(b) Find the perimeter of the figure below.



Do not write in this space.

Answer: (a)_____ [2]

(b)_____ [2]

END OF PAPER

SCORE

ANSWER KEY

YEAR : 2016
LEVEL : PRIMARY 4
SCHOOL : MARIS STELLA HIGH
SUBJECT : MATHEMATICS
TERM : SA2

Booklet A

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
2	3	2	3	1	4	4	2	4	1
Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
3	1	1	3	2	3	1	3	2	4

Booklet B

Q21 40 014

Q22 3 and 9

Q23 3389

Q24 12

Q25 $1\frac{1}{3}$

Q26 5.320, 5.203, 5.032

Q27 46.08

Q28 0.018

Q29 ∠a and ∠e

Q30 6.84 + 5.16 = 12 kg ≈ 12000 g
12000 ÷ 500 ⇒ 24 packets

Q31 28 ÷ 2 = 14
14 x 9 ⇒ 126 cookies

Q32 $16.40 + $8.20 ⇒ $24.60

Q33 8 kg

Q34

12 + 12 = 24
36 + 24 = 60
60 + 16 ⇒ 76 cm

Q35

Point R

Q36

Cross (×) at T

Q37

$98 \div 6 = 16^{R2}$
90 ÷ 6 = 15
16 x 15 ⇒ 240 pieces

Q38

28 cm

Q39

January and May

Q40

Between March and April

Q41a

$26.80 + $13.60 → $40.40
$40.40 + $26.80 ⇒ $67.20

Q41b

$150 - $67.20 → $82.80
$82.80 ÷ 6 ⇒ $13.80

Q42a

Equal → 48 ÷ 2 = 24 ℓ
A → 24 + 7 – 5 ⇒ 26 ℓ

Q42b

$\frac{1}{3}$ → 26 ℓ
$\frac{3}{3}$ → 26 x 3 ⇒ 78 ℓ

Q43

$1\frac{14}{15}$

Q44

$105 - $23 = $82
$82 ÷ 2 = $41
$41 - $23 ⇒ $18

Q45a

b x 2b = 128 cm^2
$2b^2 = 128\ cm^2$
$b^2 = 128 \div 2 = 64$
$b = \sqrt{64}$ ⇒ 8 cm

Q45b

$128 \div 2 = 64\ cm^2$
$8 \times 8 = 64\ cm^2$
Perimeter → (6 x 8) + 26 ⇒ 74 cm

End