

METHODIST GIRLS' SCHOOL

Founded in 1887



PRIMARY 5 MID-YEAR EXAMINATION 2010 MATHEMATICS

PAPER 1 (BOOKLET A)

Total Time for Booklets A and B: 50 minutes

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.

Follow all instructions carefully.

Answer all questions.

Shade your answers in the Optical Answer Sheet (OAS) provided.

The use of calculators is NOT allowed.

Name: _____ ()

Class: Primary 5. _____

Date: 6 May 2010

This booklet consists of 5 printed pages including this page.

5034

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)

1. Study the pattern below.

D D D C C B B A A D D D C C B B A A D ?
 1st 10th 133rd

What is the 133rd letter in the pattern?

- (1) A
 (2) B
 (3) C
 (4) D
2. When two six-faced dice are rolled at exactly the same time, how many different combinations are there to get a sum of 8?
- (1) 1
 (2) 2
 (3) 3
 (4) 4
3. It takes about 5 hours to drive from Singapore to Kuala Lumpur. After driving for $3\frac{1}{3}$ h, Mr Lim stopped at a small town for a meal. How much longer would he need to drive to arrive at Kuala Lumpur?
- (1) $1\frac{1}{3}$ h
 (2) $1\frac{2}{3}$ h
 (3) $2\frac{1}{3}$ h
 (4) $2\frac{2}{3}$ h

(Go on to the next page)

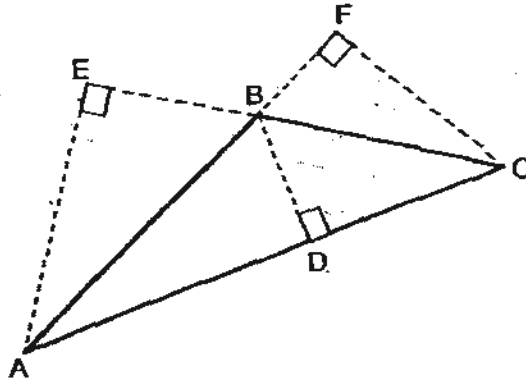
4. Ah Meng made 5 litres of lemonade to sell at a funfair. He sold $\frac{1}{4}$ of it in the morning and another $\frac{3}{8}$ of it in the afternoon. How much lemonade did he sell altogether?

- (1) $\frac{1}{3} \text{ l}$
 (2) $\frac{7}{12} \text{ l}$
 (3) $1\frac{2}{3} \text{ l}$
 (4) $3\frac{1}{8} \text{ l}$

5. Rafi's mother gave him \$24 a week for his daily expenses. He spent $\frac{1}{6}$ of it everyday, from Monday to Friday, and saves the rest. How much money does Rafi save in 4 weeks?

- (1) \$80
 (2) \$20
 (3) \$16
 (4) \$4

6. BC is the base of the triangle. Which of the following is the height?



- (1) AB
 (2) AF
 (3) BD
 (4) AE

(Go on to the next page)

7. Ann cycled 1.02 km and walked 300 m to reach her school. What was the distance covered?
- (1) 1 230 m
 - (2) 1 302 m
 - (3) 1 320 m
 - (4) 4 020 m
8. Jug A has a capacity which is $\frac{2}{5}$ of Jug B's capacity. How much water can Jug B contain if Jug A's capacity is 1.4 l?
- (1) 400 ml
 - (2) 560 ml
 - (3) 1 000 ml
 - (4) 3 500 ml
9. Jane bought 10 m of ribbon. She used all of it to tie 9 presents. How much ribbon did she use for 1 present? Give your answer to 1 decimal place.
- (1) 0.9 m
 - (2) 1.0 m
 - (3) 1.1 m
 - (4) 1.2 m
10. In a class of 40 pupils, there are 28 girls and the rest are boys. What is the ratio of the number of boys to the number of girls?
- (1) 3 : 7
 - (2) 3 : 10
 - (3) 7 : 3
 - (4) 7 : 10
11. There were 5 more pupils in Primary 5A than in Primary 5B. When 3 pupils were transferred from Primary 5B to Primary 5A, how many more pupils were there in Primary 5A than in Primary 5B?
- (1) 3
 - (2) 5
 - (3) 8
 - (4) 11

(Go on to the next page)

12. Mary bought $\frac{5}{6}$ kg of flour. She used $\frac{1}{2}$ kg of it to bake some scones and $\frac{1}{5}$ of the remainder to bake some cookies. How much flour had she left?

- (1) $\frac{1}{12}$
 (2) $\frac{1}{24}$
 (3) $\frac{2}{15}$
 (4) $\frac{4}{15}$

13. $101.111 = 100 + 1 + 0.01 + \square$

What is the missing fraction in the box?

- (1) $\frac{11}{100}$
 (2) $\frac{11}{1000}$
 (3) $\frac{101}{1000}$
 (4) $\frac{111}{1000}$

14. How many tenths must be added to 73.34 to get 74.44?

- (1) 1
 (2) 1.1
 (3) 10
 (4) 11

15. Mrs Osman had \$84. She gave the money to her sons, Azli and Sulaiman, in the ratio 2 : 5. How much more money did Sulaiman receive?

- (1) \$12
 (2) \$24
 (3) \$36
 (4) \$60

End of Booklet A

METHODIST GIRLS' SCHOOL

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PRIMARY 5 MID-YEAR EXAMINATION 2010 MATHEMATICS

PAPER 1

(BOOKLET B)

Total Time for Booklets A and B: 50 minutes

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so
Follow all instructions carefully.

Answer all questions.

Write your answers in this booklet.

The use of calculators is **NOT** allowed.

Name: _____ ()

Class: Primary 5. _____

Date: 6 May 2010

Paper 1 Booklet A	/ 20
Paper 1 Booklet B	/ 20
Paper 2	/ 60
TOTAL	/ 100

This booklet consists of 6 printed pages including this page.

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)

16. Find the greatest whole number such that

$$\square \times 8 < 102$$

Ans: _____

17. What is the missing number in the box?

$$350 \times 40 = \square \text{ hundreds}$$

Ans: _____

18. The perimeter of a rectangle is 48 cm and its breadth is 7 cm. Find its length.

Ans: _____ cm

19. Express 32 min as a fraction of one hour.

Ans: _____

(Go on to the next page)

20. A roll of ribbon is 10 m long. A ribbon of length 1 m 20 cm is needed to tie a parcel. How many parcels can be tied using the roll of ribbon?

Ans: _____

21. Martha bought $2\frac{3}{5}$ m of cloth. She used $1\frac{5}{6}$ m of it to sew a skirt. How much cloth had she left?

Ans: _____ m

22. Mr Lim withdrew \$1 500 from his bank account. He spent \$1 250 on a new television set. What fraction of his money had he left?

Ans: _____

(Go on to the next page)

23. Rashid's weight was $32\frac{1}{3}$ kg in May. In June, his weight increased by another $3\frac{5}{12}$ kg. How heavy was he in June? Give your answer in the simplest form.

Ans: _____ kg

24. The total height of 3 boys is 4.11 m. The total height of 2 of the boys is 2.98 m, what is the height of the third boy?

Ans: _____ m

25. For every 2 apples that Mr Ang sells, he sells 3 oranges. He sold 93 oranges. How many apples did he sell?

Ans: _____

(Go on to the next page)

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

(10 marks)

26. Find the value of \odot and \oplus in the following statements.

$$12 + \odot = \oplus$$

$$8 - \odot = \star$$

$$\oplus \times \star = 75$$

Ans: $\odot =$ _____

$\oplus =$ _____

27. Use the digits 0, 2, 3, 7 to form the smallest 3-digit number that can be divided by 3 without any remainder.

Ans: _____

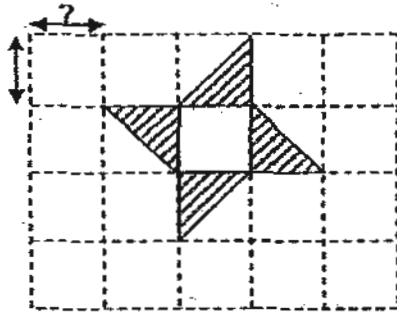
28. $\frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} = \square \times \frac{1}{4} + 1\frac{3}{4}$

What is the missing number in the box?

Ans: _____

(Go on to the next page)

29. The figure is made up of 4 triangles drawn on a square grid. The shaded parts have an area of 18 cm^2 . What is the length of 1 unit of the grid?



Ans: _____ cm

30. Mrs Lim bought $2\frac{2}{3}$ m of cloth. Mrs Tan bought $1\frac{1}{6}$ m of cloth. How much cloth do they have altogether? Give your answer correct to 2 decimal places.

Ans: _____ m

End of Booklet B

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PRIMARY 5 MID-YEAR EXAMINATION 2010
MATHEMATICS
PAPER 2

Duration: 1 h 40 min

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.

Follow all instructions carefully.

Answer all questions.

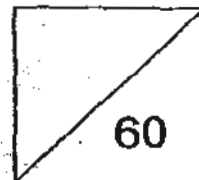
Write your answers in this booklet.

The use of an approved calculator is expected, where appropriate.

Name: _____ ()

Class: Primary 5. _____

Date: 6 May 2010



This booklet consists of 14 printed pages including this page.

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

(10 marks)

-
1. When a sum of money is divided equally among 16 girls, each girl gets \$15.
How much will each girl get if 9 more girls join the group?

Ans: \$ _____

2. I am a decimal number beginning with the digit 4.
The sum of all my digits is 20.
The digit in my ones and hundredths place is the first common multiple of 2 and 3.
What number am I?

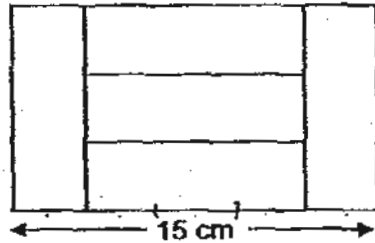
Ans: _____

3. Mary bought some stickers. She gave $\frac{1}{6}$ of it to Amelia, and $\frac{2}{3}$ of the remaining stickers to Bonita. She kept the rest for herself.
What fraction of the stickers did she have left for herself?

Ans: _____

(Go on to the next page)

4. Five similar rectangles are cut from a piece of paper which has a length of 15 cm.
Find the area of rectangle.



Ans: _____ cm²

5. Seven seedlings are planted evenly spaced over a distance of 10.5 m. What is the distance between the 1st and 5th seedling.

Ans: _____ m

(Go on to the next page)

For questions 6 to 18, show your working clearly 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)

6. Mr Samy has 441 fruits in his stall.

$\frac{5}{7}$ of the fruits at Mr Samy's stall are oranges, $\frac{1}{9}$ are apples and the rest are pears.

How many pears does he have in his stall?

Ans: _____ [3]

7. Rani filled 3 similar jugs, A, B and C with apple juice in the ratio 3 : 4 : 5 respectively.

She poured all the juice in Jug C into 6 glasses, and each glass had a capacity of 225 ml of juice each. How much juice was there in the 3 jugs altogether?

Give your answer in litres.

Ans: _____ [3]

(Go on to the next page)

8. Samad's weight is $\frac{6}{7}$ of Ricky's weight and Ricky's weight is $\frac{1}{2}$ of Benny's weight. If Benny is 42 kg, how much heavier is Benny than Samad?

Ans: _____ [3]

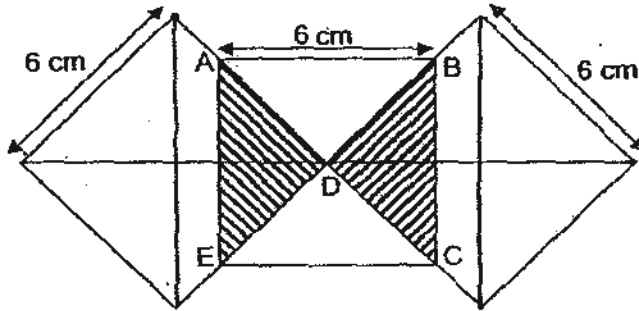
9. A stall at the market sells a 3-kg bag of potatoes for \$2.85 and a 5-kg bag for \$4.50. What is the *minimum* amount Mrs Yeo has to pay to buy *exactly* 24 kg of potatoes from the stall?

Ans: _____ [3]

(Give your answer in dollars.)

(Go on to the next page)

10. The figure is made up of 3 similar overlapping squares of side 6 cm. The squares touched one another at corners A, B, C, D and E. Jane shaded the parts where the squares overlapped each other.
- (a) Find the area of the figure.
- (b) What fraction of the figure is the shaded part?



Ans: (a) _____ [2]

(b) _____ [1]

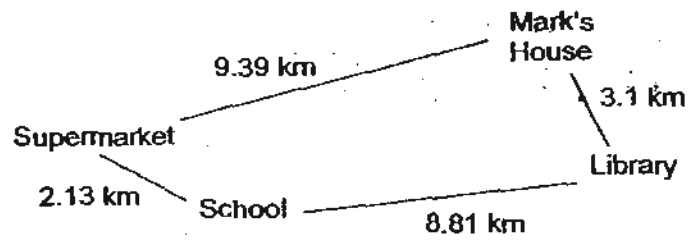
(Go on to the next page)

11. Sarah and June had a total of \$132 in their piggy banks. When \$20 was added to each girl's piggy bank, June had 3 times as much money as Sarah. How much did June have at first?

Ans: _____ [4]

(Go on to the next page)

12. The diagram below shows the distance from Mark's house to the various places. Study it and answer the following questions.



- (a) What was the shortest distance that Mark took to travel to school?
- (b) From Monday to Friday, Mark travels to the supermarket, to school, to the library and back to his house. He can travel for 12 km on 1 litre of petrol. If 1 litre of petrol costs \$1.72, how much did he spend on petrol for those days? Give your answer correct to 2 decimal places.

Ans: (a) _____ [1]

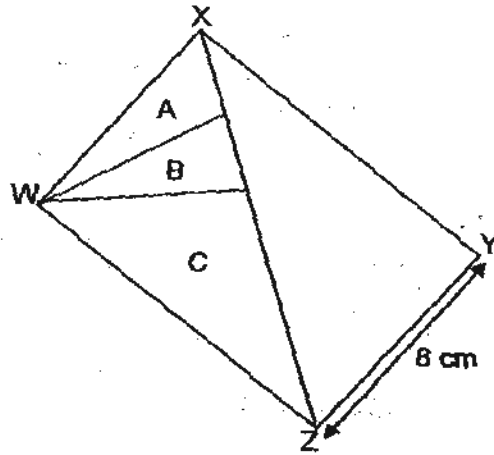
(b) _____ [3]

(Go on to the next page)

13. WXYZ is a rectangle which has a breadth of 8 cm. It is divided into 4 triangles. Triangle A is $\frac{1}{10}$ the area of the rectangle and $\frac{1}{3}$ the area of Triangle C. Triangle B has an area of 12 cm^2 .

Find

- (a) the area of the rectangle and
(b) its perimeter.

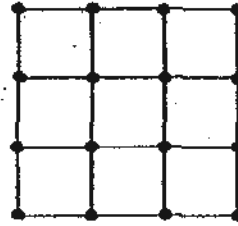


Ans: (a) _____ [2]

(b) _____ [2]

(Go on to the next page)

14. The following patterns shown below are created using dots and lines. It takes 4 dots to form a square, 9 dots to form 4 squares, 16 dots to form 9 squares.



Size of: 1 x 1
square

2 x 2

3 x 3

- (a) How many dots are needed to create the next pattern?
 (b) What is the size of the square formed using 144 dots?

Ans: (a) _____ [2]

(b) _____ [2]

(Go on to the next page)

15. Sam and Mark shared a certain amount of money.
After Sam had spent $\frac{1}{3}$ of his money and Mark spent $\frac{5}{9}$ of his money, Sam had twice as much money as Mark left. How much did Sam spend if Mark spent \$38?

Ans: _____ [4]

(Go on to the next page)

16. Maniam has $\frac{1}{5}$ as much money as Nancy, and Nancy has $\frac{3}{8}$ as much money as Osman. If Osman has \$444 more than Maniam, how much do the 3 children have altogether?

Ans: _____ [5]

(Go on to the next page)

17. There are 42 pupils in each of the classes, Primary 5A and Primary 5B. The ratio of the number of boys in Primary 5A to the number of boys in Primary 5B was 3:4. The ratio of the number of girls in Primary 5A to the number of girls in Primary 5B was 4:3. There were 56 boys altogether in both classes. What was the ratio of boys in Primary 5A to the number of girls in Primary 5B?

Ans: _____ [5]

(Go on to the next page)

18. Ethan had 242 red, blue and yellow marbles altogether. He had 18 more blue than red marbles and half as many yellow as blue marbles.
- (a) How many blue marbles did he have?
 - (b) How many more yellow marbles does he need to buy so that he has the same number of yellow and red marbles.

Ans: (a) _____ [3]

(b) _____ [2]

End of Paper

ANSWER SHEET

EXAM PAPER 2010

SCHOOL : MGS PRIMARY
SUBJECT : PRIMARY 5 MATHEMATICS

TERM : SA1

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

- 16)12 17)140 18)17 19)8/15 20)8 parcels
21)23/30m 22)1/6 23)35¾kg 24)1.13m 25)62 apples
26) ☀ = 3 ⊗ = 15 27)20 28)3 29)3cm 30)3.83m

Paper 2

1) $15 \times 16 = 240$ $16 + 9 = 25$ $240 \div 25 = \$9.6$	2) 46.46
3) $1/3 \times 5/6 = 5/18$	4) $15 \div 5 = 3$ $3 \times 3 = 9$ $9 \times 3 = 27\text{cm}^2$
5) $10.5 \div 6 = 1.75$ $1.75 \times 4 = 7\text{m}$	6) $5/7 + 1/9 = 45/63 + 7/63$ $= 52/63$ $441 \div 63 = 7$ $63/63 - 52/63 = 11/63$ $11 \times 7 = 77 \text{ pears}$
7) Total amt. of 6 glasses = $225 \times 6 = 1350$ $1\text{u} \rightarrow 1350 \div 5 = 270$ $3 + 4 + 5 = 12$ $12\text{u} \rightarrow 270 \times 12 = 3240$ Lit res = $3240 \div 1000 = 3.240(\text{L})$ There was 3.24L of juice	8) $7 \times 2 = 14$ $42 \div 14 = 13$ $8 \times 3 = 24\text{kg}$

<p>9) $3 + 5 = 8$ $24 \div 8 = 3$ $2.85 + 4.50 = 7.35$ $7.35 \times 3 = \\$22.05$</p>	<p>10)a) $6 \times 6 = 36$ $36 \div 4 = 9$ $36 \times 3 = 108$ $108 - 18 = 90\text{cm}^2$ b) $2/10 = 1/5$</p>
<p>11) Total amt = $132 + 20 + 20 = 172$ 1u $\rightarrow 172 \div 4 = 43$ June's amt. = $43 \times 3 = 129$ At first = $129 - 20 = \\$109$</p>	<p>12)a) $3.1\text{km} + 8.81\text{km} = 11.91\text{km}$ $9.39 + 2.13 = 11.52\text{km}$ b) $(9.39 + 2.13 + 8.81 + 3.1) \times 5 = 117.15$ $(117.15 + 12) \times 1.72 = \\16.79</p>
<p>13)a) Total no. of parts $\rightarrow 10$ Triangle A $\rightarrow 1$ unit Triangle B $\rightarrow 1$ unit $\rightarrow 12\text{cm}^2$ Triangle C $\rightarrow 3$ units $10 \times 12 = 120\text{cm}^2$ b) Breath $\rightarrow 120 \div 8 = 15$ Perimeter $\rightarrow 2 \times (15 + 8) = 46\text{cm}$</p>	<p>14)a) $4 \times 4 = 16$ $16 + 9 = 25$ dots b) $144 = 12 \times 12$ $12 - 1 = 11$ The size is 11×11</p>
<p>15) $38 \div 5 = 7.60$ $7.60 \times 4 = \\$30.40$</p>	<p>16) $37\text{u} \rightarrow \\444 $444 \div 37 = 12.00$ $40 + 15 + 3 = 58$ $58 \times 12 = \\$696$</p>
<p>17) 1:1</p>	<p>18)a) $18 \times 4 = 72$ $242 - 72 = 170$ $170 \div 5 = 34$ $34 + 18 + 34 + 18 = 104$ marbles b) $34 + 18 = 52$ $52 + 34 = 86$ $86 - 52 = 34$ yellow marbles</p>