

METHODIST GIRLS' SCHOOL (Primary)
Mid-Year Examination 2007
Primary 5

Mathematics

Booklet A

Name: _____ ()

Class: P 5. _____

Total time for Booklets A, B1 and B2: 2h 15 min

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

FOLLOW THE INSTRUCTIONS CAREFULLY.

ANSWER ALL QUESTIONS.

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. Six million, four hundred and ten thousand in numerals is _____.
(1) 6 000 410
(2) 6 004 010
(3) 6 400 010
(4) 6 410 000

2. Evaluate $100 - (46 \div 2) + 7 \times 2$.
(1) 41
(2) 68
(3) 91
(4) 490

3. A number when rounded off to the nearest hundred becomes 43 000. Which one of the following can be that number?
(1) 42 849
(2) 42 904
(3) 42 953
(4) 43 108

4. How many metres are there in $\frac{4}{5}$ km ?
(1) 8 m
(2) 80 m
(3) 800 m
(4) 8 000 m

5. Susan added $\frac{3}{8}$ l of syrup into a canister that was filled with $5\frac{2}{3}$ l of water.
How much drink was in the canister?

(1) $4\frac{2}{3}$ l

(2) $5\frac{7}{24}$ l

(3) $5\frac{5}{8}$ l

(4) $6\frac{1}{24}$ l

6. What must be added to $2\frac{1}{3}$ to get $5\frac{1}{6}$?

(1) $2\frac{5}{6}$

(2) $3\frac{1}{6}$

(3) $7\frac{1}{2}$

(4) $7\frac{1}{6}$

7. John divided $\frac{3}{4}$ of a pizza equally among 3 children.
How much pizza would each child get?

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

(2) $\frac{1}{3}$

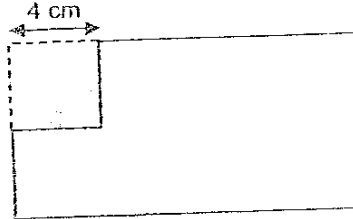
(3) $\frac{4}{7}$

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

2

8. A 4-cm square is cut out from the corner of a rectangular piece of paper 14 cm by 9 cm. Find the perimeter of the remaining piece of paper.

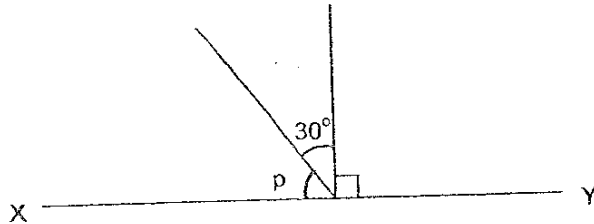
- (1) 28 cm
- (2) 33 cm
- (3) 38 cm
- (4) 46 cm



9. A tank measuring 60 cm by 70 cm by 40 cm is half-filled with water. How much water is there in the tank? (1 litre = 1 000 cm³)

- (1) 84 litres
- (2) 85 litres
- (3) 168 litres
- (4) 170 litres

10. In the figure, not drawn to scale, XY is a straight line. Find $\angle p$.



- (1) 30°
 - (2) 60°
 - (3) 90°
 - (4) 120°
11. Jennifer reads 12 pages of her book every day. If this book has 272 pages, she will finish reading her book on the _____ day.
- (1) 21st
 - (2) 22nd
 - (3) 23rd
 - (4) 24th

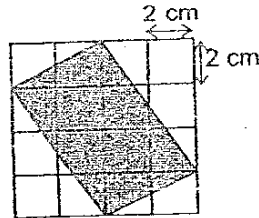
12. At a recent bookfair, books were sold at 3 for \$4. Sarah bought 15 books. She paid with a \$100-note. How much change did Sarah receive?

- (1) \$20
- (2) \$40
- (3) \$60
- (4) \$80

13. In a box of 60 pens, $\frac{1}{4}$ are blue and the rest are black. How many more black pens than blue pens are there?

- (1) 5
- (2) 15
- (3) 30
- (4) 45

14. What is the area of the shaded figure?



- (1) 8 cm^2
- (2) 16 cm^2
- (3) 24 cm^2
- (4) 32 cm^2

15. The sides of a triangle are in the ratio 2 : 3 : 7. If the shortest side is 4 cm, what is its perimeter?

- (1) 2 cm
- (2) 14 cm
- (3) 24 cm
- (4) 48 cm

METHODIST GIRLS' SCHOOL (Primary)
Mid-Year Examination 2007
Primary 5

Mathematics

Booklet B1

Name: _____ ()

Booklet B1 (30)	
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Class: P 5. _____

Total time for Booklets
A, B1 and B2: 2h 15 min

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ANSWER ALL QUESTIONS.

5

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. What must be added to 99 to make a million?

Ans: _____

17. Find the sum of the first 2 common multiples of 4 and 8.

Ans: _____

18. Round off the difference between 13 687 and 8 423 to the nearest thousand.

Ans: _____

19. Write the smallest possible 5-digit number using 5 different digits.

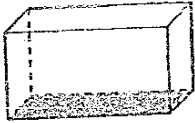
Ans: _____

6

20. The area of a rectangular wooden plank is 220 cm^2 .
Find its length if its breadth is 11 cm .

Ans: _____ cm

21. The volume of the following rectangular box is 324 cm^3 . Find its height if its base area is 81 cm^2 .



Ans: _____ cm

22. $\frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5} = \square \times \frac{6}{5}$

What is the missing number in the box?

Ans: _____

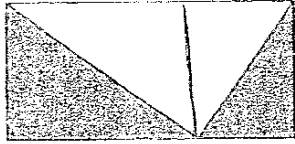
23. Arrange the fractions in ascending order, from the smallest to the largest.

$$\frac{7}{8}, \frac{1}{2}, \frac{3}{4}, \frac{5}{6}$$

7

Ans: _____

24. What fraction of the rectangle is shaded? Express your answer in the simplest form.



Ans: _____

25. Jane weighs 60 kg. Her sister is 12 kg heavier.
Find the ratio of Jane's weight to her sister's weight.
Express your answer in the simplest form.

Ans: _____

Questions 26 to 35 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. (20 marks)

26. Ashley was given \$522. She had \$18 left after 2 weeks. If she had spent the same amount of money each day, how much did she spend each day?

Ans: \$ _____

27. Lisa has 12 times as much money as Melody.
If Lisa has \$132 more than Melody, how much money does Lisa have?

Ans: \$ _____

28. Michelle bought 416 pastries for a party.
Each guest ate 4 pastries and there were 20 pastries left.
How many guests were there?

Ans: _____

29. The total volume of some metal balls is 270 cm^3 . These metal balls are then melted and recast into 3-cm cubes. How many cubes will there be?

Ans: _____

30. The perimeter of a rectangle is 64 cm. Its length is 24 cm. What is the area of the rectangle?

Ans: _____ cm^2

31. Express 36 minutes as a fraction of 3 hours. Give your answer in the simplest form.

Ans: _____

7/10

32. How many eighths are there in $2\frac{1}{4}$?

Ans: _____ eighths

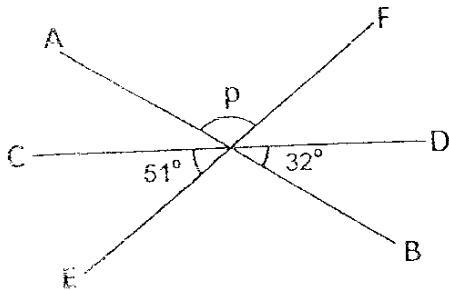
33. If $\frac{1}{6}$ of a number is 6, what is half the number?

Ans: _____

34. The ratio of two numbers is 5 : 2. The sum of the two numbers is 12 more than their difference. Find the sum of the two numbers.

Ans: _____

35. The figure below is not drawn to scale. AB, CD and EF are straight lines.
Find $\angle p$.



Ans: _____

METHODIST GIRLS' SCHOOL (Primary)
Mid-Year Examination 2007
Primary 5

Mathematics

Booklet B2

Name: _____ ()

Class: P 5. _____

Total time for Booklets
A, B1 and B2: 2h 15 min

Booklet A (20)	
Booklet B1 (30)	
Booklet B2 (50)	
Total: (100)	

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FOLLOW THE INSTRUCTIONS CAREFULLY.

ANSWER ALL QUESTIONS.

13

For questions 36 to 48, 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 the brackets [] at the end of each question or part-question. (50 marks)

36. 5 years from now, Jenny will be twice as old as Karen.
Karen was born eleven years ago.
How old is Jenny now?

Ans: _____ [3]

37. When a bus left the interchange, there were 42 pupils in the bus.
At the first bus-stop, 8 boys boarded the bus.
As a result, the number of boys was equal to the number of girls.
At the next bus stop, 12 girls got off.
How many girls were left in the bus?

Ans: _____ [3]

14

38. Ben sold 24 rubber ducks on Thursday.
He sold $\frac{2}{5}$ of the remainder on Friday.
If he still had 99 rubber ducks to be sold on Saturday, how many rubber ducks did he have at first?

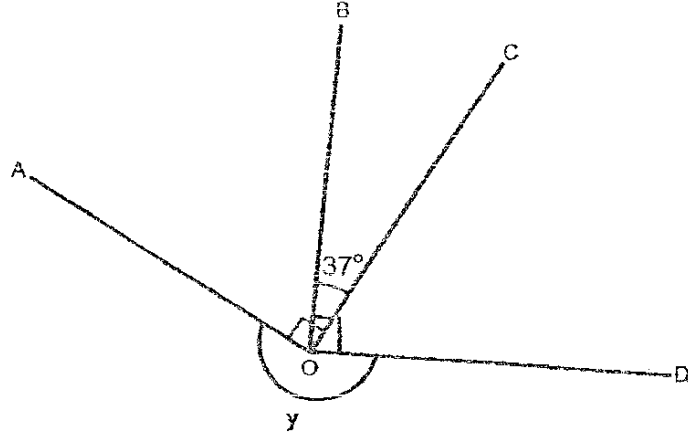
Ans: _____ [3]

39. Carrie and Diane had some paper cranes in the ratio 5 : 3.
Carrie gave half of her paper cranes to Diane.
Diane then had 24 more paper cranes than Carrie.
How many paper cranes did they have altogether?

Ans: _____ [3]

15

40. $\angle AOC$ and $\angle BOD$ are right angles. Find $\angle y$.



Ans: _____ [3]

41. Weiling had a total of 180 marks for English and Chinese in her mid-year examination. She had a total of 170 marks for her Chinese and Mathematics. She had 4 more marks for Chinese than English. How many marks did she get for Mathematics?

Ans: _____ [4]

16

42. Faridah saved \$3 200. Grace saved \$450 less than Faridah.
Huimin saved 4 times as much as money as Grace.

- a) How much money did Huimin save?
- b) How much did the 3 girls save altogether?

Ans: a) _____ [2m]

b) _____ [2m]

43. Santhi had \$26 more than Nurul.
After Santhi received another \$35 and Nurul spent \$65, Santhi then had 7 times as much money as Nurul. How much money did Nurul have at first?

Ans: _____ [4]

18

44. Mrs Lee spent \$120 on a watch. She spent $\frac{1}{7}$ of her remaining money on a pair of shoes. If she had $\frac{3}{5}$ of his money left, how much money did Mrs Lee have at first?

Ans: _____ [4]

45. A box measures 56 cm long, 23 cm wide and 106 cm high. Ella wants to fill the box with as many cubes as she can. Each cube has a volume of 64 cm^3 .
What is the maximum number of cubes that Ella can fill the box with?

Ans: _____ [4]

20

46. A box contained \$2 and \$5 notes. $\frac{1}{4}$ ^{of} the number of \$2 notes is equal to $\frac{4}{5}$ ^{of} the number of \$5 notes. There is a total of 315 notes in the box. Find the total value of all the notes in the box.

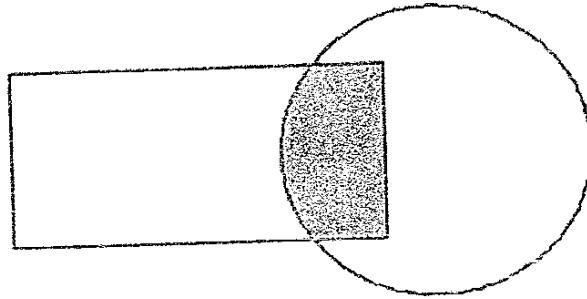
Ans: _____ [5]

47. A jug contains 4 litres of water. When Rachel poured $\frac{3}{5}$ of the water into an empty rectangular container, the rectangular container became $\frac{3}{4}$ full. Find the height of the container if its base area is 500 cm^2 . (1 litre = $1\,000 \text{ cm}^3$)

Ans: _____ [5]

48. The figure below is made up of a rectangle and a circle.
The ratio of the shaded area of the figure to the area of rectangle is 3 : 8.
The ratio of the shaded area to the area of the circle is 1 : 5.
The shaded area is 27 cm^2 .

- a) Find the area of the circle.
b) Find the ratio of the shaded part of the figure to the total unshaded parts of the figure.



Ans: a) _____ [2]

b) _____ [3]

☺ End of Paper ☺

Please check your work.

Methodist Girls' Primary School

Primary 5 Maths SA1 Exam (2007)



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

16. 999901
17. 24
18. 5009
19. 10234
20. 20cm
21. 4cm
22. 4
23. $\frac{1}{2}, \frac{3}{4}, \frac{5}{6}, \frac{7}{8}$
24. $\frac{1}{2}$
25. 5 : 6
26. \$36
27. S144
28. 99 guests
29. 10 cubes
30. 192cm²
31. $\frac{1}{5}$
32. 18 eighths
32. 18
34. 21
35. $32^\circ + 51^\circ = 83^\circ$
 $180^\circ - 83^\circ = 97^\circ$
36. $11 + 5 = 16$
 $16 \times 2 = 32$
 $32 - 5 = 27$
 Jenny is 27 years old now.

37. $42 + 8 = 50$
 $50 \div 2 = 25$
 $25 - 12 = 13$
13 girls were left

38. $99 \div 2 = 33$
 $33 \times 5 = 165$
 $165 + 24 = 189$
He had 189 rubber ducks at first.

39. $11 - 5 = 6$
 $24 \div 4 = 6$
 $10 + 6 = 16$
 $4 \times 16 = 64$
They had 64 paper cranes altogether.

40. $90^\circ - 37^\circ = 53^\circ$
 $53^\circ \times 2 = 106^\circ$
 $106^\circ + 37^\circ = 143^\circ$
 $360^\circ - 143^\circ = 217^\circ$
 $\angle y = 217^\circ$

41. $180^\circ - 40^\circ = 176^\circ$
 $176^\circ \div 2 = 88^\circ$
 $88^\circ + 4^\circ = 92^\circ$
 $170 - 92^\circ = 78^\circ$
Weiling got 78 marks for Maths.

42a. $\$(3200 - 450) = \2750
 $\$(2750 \times 4) = \11000
Huimin saved \$11000

42b. $\$(3200 + 2750) = \5950
 $\$(5950 + 11000) = \16950
The three girls saved \$16950 altogether.

43. $26 + 35 = 61$
 $61 + 65 = 126$
 $7 - 1 = 6$
 $126 \div 6 = 21$
 $21 + 65 = 86$
Nurul had \$86 at first.

44. $120 \div 3 = 40$
 $40 \times 10 = 400$
Mrs Lee had \$400 at first.
45. $56 \div 4 = 14$
 $106 \div 4 = 26 \text{ r}2$
 $14 \times 5 \times 26 = 1820$
Ella can fill the box 1820 cubes.
46. $\$(315 \div 21) = \15
 $\$(15 \times 5) = \75
 $\$(16 \times 15) = \240
 $\$(75 \times 5) = \375
 $\$(240 \times 2) = \480
 $\$(375 + 480) = \855
The value of the notes is \$855
47. $4000 \div 5 = 800$
 $800 \times 3 = 2400$
 $2400 + 800 = 3200$
 $3200 \div 500 = 6.4$
The height is 6.4m
- 48a. $27 \times 5 = 135$
The area of the circle is 135cm^2
- 48b. $3 : 17$