

CONVENT OF THE HOLY INFANT JESUS



PRIMARY SIX PRELIMINARY EXAMINATION 2008

MATHEMATICS

BOOKLET A

NAME : _____ ()

CLASS : _____

DATE : 19 AUGUST 2008

15 QUESTIONS

20 MARKS

INSTRUCTIONS TO CANDIDATES

TOTAL TIME FOR BOOKLETS A & B : 2 HOURS 15 MINUTES
DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.
FOLLOW ALL INSTRUCTIONS CAREFULLY.

ANSWER ALL THE 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 correct oval (1, 2, 3 or 4) on the
Optical Answer Sheet (OAS).

(20 marks)

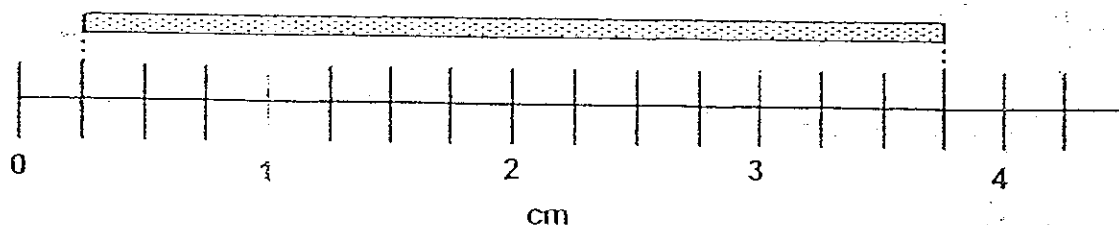
1) What is the value of the digit 3 in 95.348?

- 1) 3 ones
- 2) 3 tens
- 3) 3 tenths
- 4) 3 hundredths

2) Find the value of $12 + 40 \div 4 \times 3$.

- 1) 66
- 2) 42
- 3) 39
- 4) 15

3) What is the length of the stick?



- 1) 3.5 cm
- 2) 3.6 cm
- 3) 3.25 cm
- 4) 3.75 cm

4) A sack of rice has a mass of 5 kg. It is heavier than a bag of potatoes by $\frac{3}{5}$ kg.
What is the mass of the bag of potatoes?

1) 4 700 g

2) 4 500 g

3) 4 400 g

4) 4 200 g

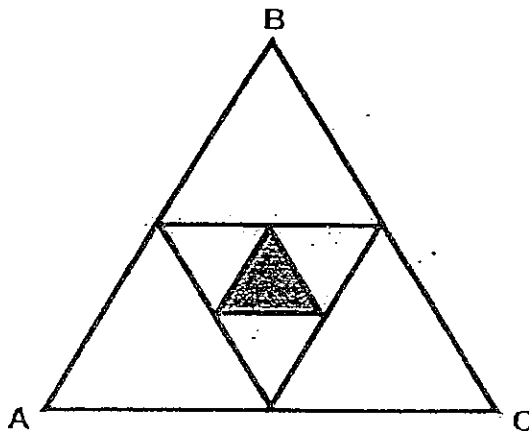
5) The figure below is made up of equilateral triangles. If the area of the shaded triangle is 14 cm^2 , what is the area of triangle ABC?

1) 56 cm^2

2) 98 cm^2

3) 168 cm^2

4) 224 cm^2



6) Lifen roller blades at an average speed of 16 km/h. How long does she take to roller blade 20 km?

1) 40 min

2) 48 min

3) 1h 15 min

4) 1h 20 min

7) A wheel makes 350 revolutions in 25 minutes. At this rate, how many revolutions will it make in 1 h 40 min ?

1) 1 050

2) 1 400

3) 1 750

4) 1 960

8) Miss Siti packed 3 coloured markers in a bag. She sold each bag of markers for \$5.20. How much money did she receive after selling 60 coloured markers?

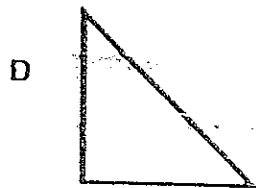
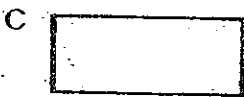
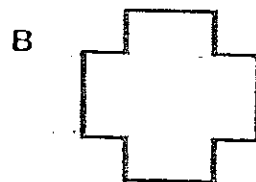
1) \$312.00

2) \$180.00

3) \$104.00

4) \$ 10.40

9) Which of the following figures has 4 lines of symmetry each?



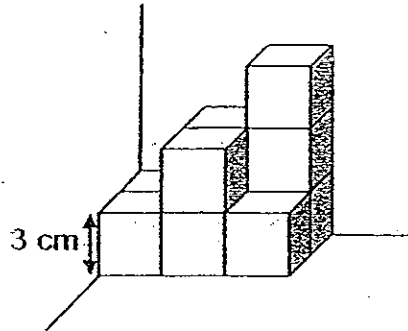
1) A and B

2) A and C

3) B and C

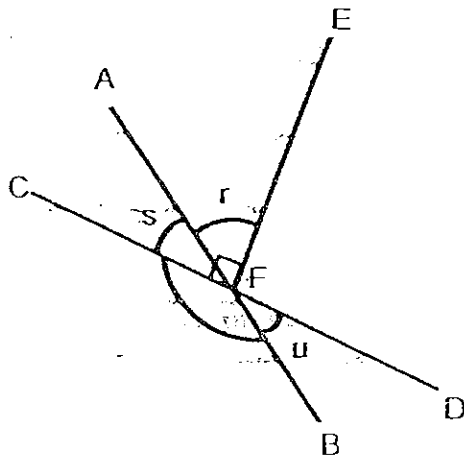
4) B and D

10) The solid figure is made up of 3-cm cubes. Find the volume of the solid figure.



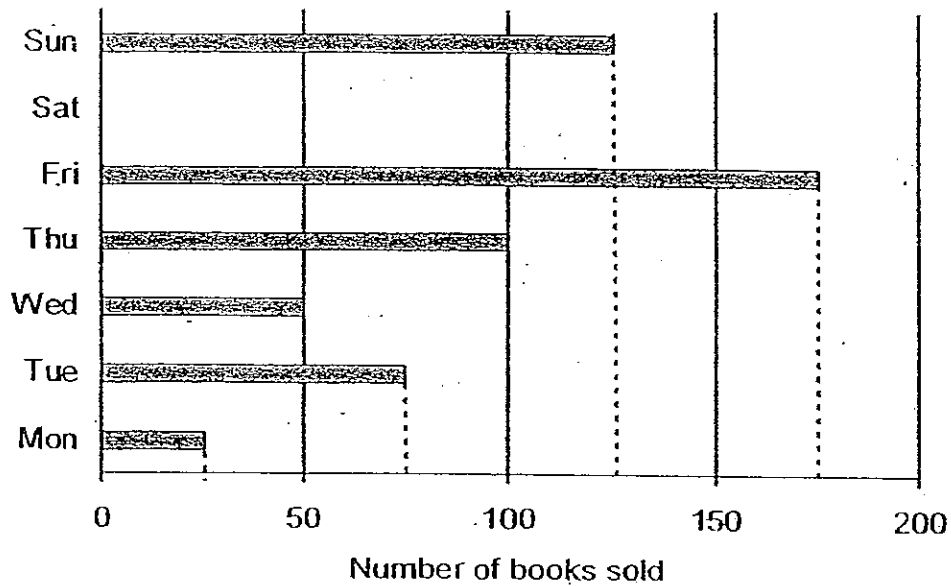
- 1) 10 cm^3
- 2) 11 cm^3
- 3) 270 cm^3
- 4) 297 cm^3

11) The figure below is not drawn to scale. AB and CD are straight lines. Which one of the following statements is true?



- 1) $\angle r = \angle s$
- 2) $\angle r + \angle s = \angle t$
- 3) $\angle s + \angle t = \angle r + \angle u$
- 4) $\angle r + \angle u = \angle r + \angle s$

The graph below shows the number of books Yelbel Bookstore sold during a week. Use it to answer questions 12 and 13.



12) If the average number of books sold each day was 95, find the total number of books sold on Saturday.

- 1) 665
- 2) 550
- 3) 165
- 4) 115

13) What is the percentage increase in the number of books sold from Wednesday to Thursday?

- 1) 200%
- 2) 100%
- 3) $66\frac{2}{3}\%$
- 4) $33\frac{1}{3}\%$

14) Sam had 3 cards all printed with a different whole number. The largest number is 45. When these numbers are added 2 at a time, the sums are 62, 69 and 83. What is the smallest number printed on the card?

1) 7

2) 17

3) 24

4) 38

15) Calvin's mother is 30 years older than he is. In 9 years' time, Calvin will be $\frac{1}{3}$ of his mother's age. What is the ratio of Calvin's present age to his mother's present age?

1) 1 : 3

2) 1 : 6

3) 3 : 10

4) 9 : 39

End of Booklet A

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)

Do not write in this space.

16) Express 0.25 as a fraction.

Ans : _____

17) Study the number pattern below. What is the number marked Y?

| |
|---------------------|
| $3 \times 37 = 111$ |
| $6 \times 37 = 222$ |
| $9 \times 37 = 333$ |
| \dots |
| \dots |
| \dots |
| $Y \times 37 = 555$ |

Ans : _____



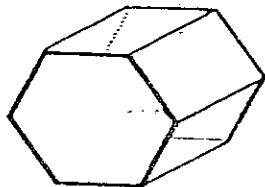
134

- 18) Alisa and her 3 friends spent a total of \$1188 in a restaurant. If they shared the bill equally, how much did each of them pay?

Do not write in this space.

Ans : \$ _____

- 19) How many rectangular faces does the solid figure have?



Ans : _____

- 20) The figure below consists of 2 identical semicircles of diameter 7 cm. What is the perimeter of the figure? Leave your answer in terms of π .



Ans : _____ cm



21) The volume of a cube is 125 cm^3 . What is the length of the edge of the cube ?

Do not
write in
this space.

Ans : _____ cm

22) Mr Teng drove $5\frac{1}{4}$ hours from Singapore to Kuala Lumpur. He reached Kuala Lumpur at 2.45 p.m.. At what time did he set off from Singapore? Leave the answer in the 24-hour clock.

Ans : _____

23) The total mass of 9 identical rubber balls is 1080 g. What is the average mass of each rubber ball?

Ans : _____ g



CONVENT OF THE HOLY INFANT JESUS



PRIMARY SIX PRELIMINARY EXAMINATION 2008

MATHEMATICS

BOOKLET B

NAME : _____ ()

CLASS : _____

DATE : 19 AUGUST 2008

33 QUESTIONS
80 MARKS

| | |
|-----------|-----|
| Booklet A | 20 |
| Booklet B | 80 |
| Total | 100 |

Parent's Signature

INSTRUCTIONS TO CANDIDATES

TOTAL TIME FOR BOOKLETS A & B : 2 HOURS 15 MINUTES
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ANSWER ALL THE QUESTIONS

24) Express $\frac{5}{8}$ as a percentage.

Do not
write in
this space.

Ans : _____ %

25) 6 bottles of juice were poured equally into 12 glasses. If there were q ml of juice in each bottle, what was the amount of juice in each glass?

Ans : _____ ml



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.

Do not write in this space

(20 marks)

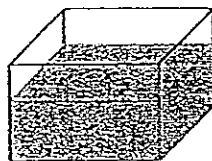
- 26) Miss Teo saved $\frac{3}{8}$ of her salary and $\frac{2}{5}$ of the remaining amount on food. If she spent the rest of her salary on transport and rent, what fraction of her salary did she spend on transport and rent?

Ans : _____

- 27) Kris and Jen had \$135 altogether. After Kris spent $\frac{1}{2}$ of her money and Jen spent $\frac{3}{5}$ of hers, both had the same amount of money left. How much money had Kris at first?

Ans : \$ _____

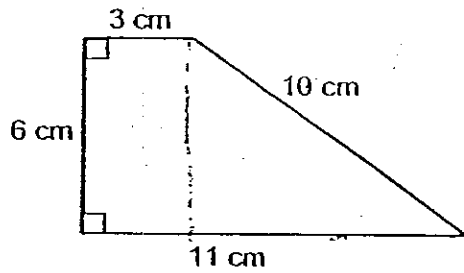
- 28) The rectangular tank below is $\frac{2}{3}$ full of water and contains 1.05 l of water. Find the capacity of the tank.



Ans : _____ cm³

Do not
write in
this space

29) Find the area of the figure below.



Ans : _____ cm²

30) Mr Yusoff parked his car at Far East Mall from 11 a.m. to 6 p.m. on a Wednesday. Find the amount of parking charges he has to pay based on the rates shown in the table below.

| Day | Time | Parking Charges |
|------------------|---------------------|---|
| Monday to Friday | 6.00 a.m. to 5 p.m. | \$1.50 per $\frac{1}{2}$ h or part thereof. |
| | After 5 p.m. | \$3.00 per entry |

Ans : \$ _____



- 31) Edwin wanted to buy 30 muffins for a party. How many muffins would he need to pay for?

Special Offer
Buy 5 and get 1 free

Ans : _____

- 32) In a cinema, the ratio of the number of occupied seats to the number of unoccupied seats was 7 : 10. If 252 seats were occupied, what is the total number of seats in the cinema?

Ans : _____

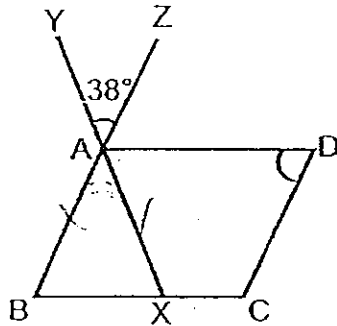
- 33) Mr Sim bought some durians for \$105 at a discount of 40%. What was the usual price of the durians?

Ans : \$ _____

Do not
write in
this space

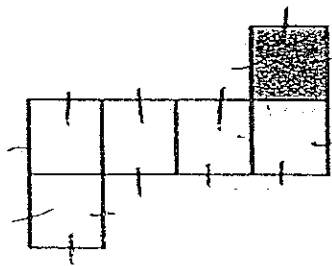
- 34) The figure below is not drawn to scale. ABCD is a parallelogram. XY and BZ are straight lines. $AB = AX$. Find $\angle ADC$.

Do not write in this space.

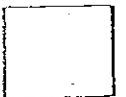


Ans : _____ °

- 35) The figure below shows the net of a cube which has a perimeter of 42 cm. Find the area of one face.



Ans : _____ cm^2

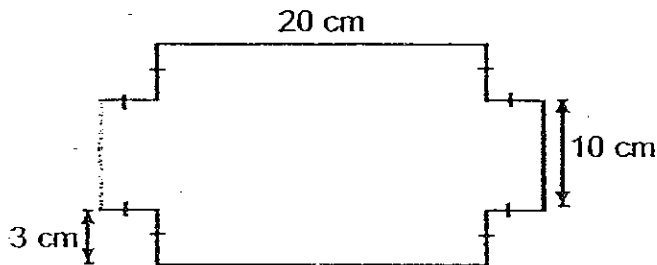


For questions 36 to 48, show your working clearly in the space provided for each question and write your answers in the spaces provided. The number of marks available is shown in brackets () at the end of each question or part-question.

Do not write in this space.

(50 marks)

- 36) Zoerraine had a piece of twill 45 cm long. She wanted to use the twill to make a figure as shown below. How much more twill did she need? (All the lines meet at right angles.)



Ans : _____ (3)

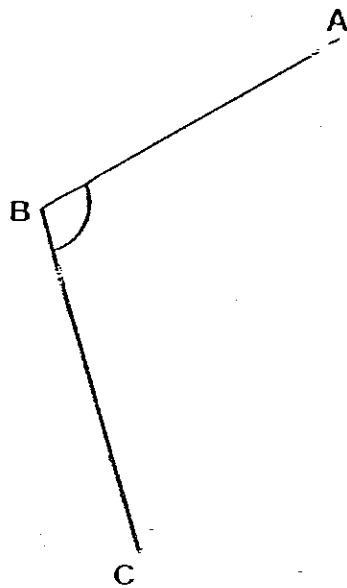
- 37) Amir was left with $\$4n$ after buying 2 identical pens at $\$2.15$ each.
 (a) Find the total amount of money he had at first. Leave your answer in terms of n .
 (b) Given that $n = 7$, how much money did he have at first?

Ans : (a) _____ (2)

(b) _____ (1)



- 38 (a) In the figure below, draw two lines AD and CD such that AD is parallel to BC and AB is parallel to DC. Label the figure.



Do not write in this space

(1)

- (b) Draw a line to join point A to C.

(1)

- (c) Measure and write down the length of AC.

Ans : _____ (1)



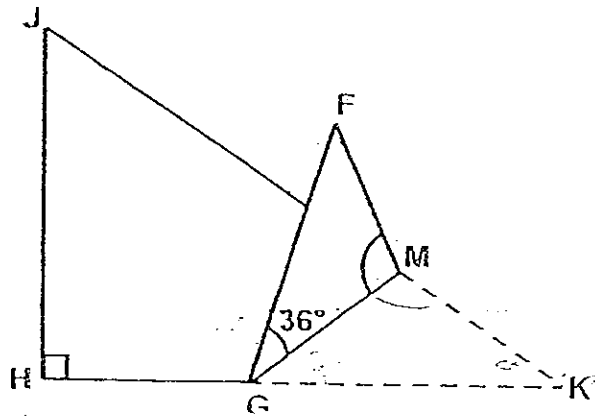
154.

- 39) An equal number of men and women turned up for an audition. After 74 men and thrice as many women were rejected, the number of men was 5 times that of the women. How many people turned up for the audition?

Do not write in this space.

Ans : _____ (3)

- 40) The figure below shows a triangular piece of paper being folded at a corner F. Given that $JH = HK$, find $\angle FMG$.



Ans : _____ (3)



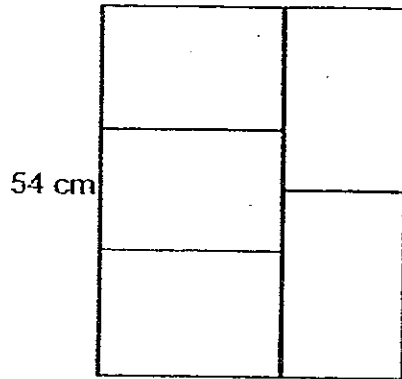
- 41) Gwyneth, Freda and Deshalyn shared a bag of buttons equally.
Gwyneth divided her share into 3 equal packs.
Freda divided hers into 6 equal packs.
Deshalyn divided hers into 8 equal packs.
The total number of buttons in 1 pack of Gwyneth's share,
2 packs of Freda's share and 2 packs of Deshalyn's share was 66.
How many buttons did the bag contain originally?

Do not
write in
this space.

Ans : _____ (3)



- 42) The figure below shows a rectangular cardboard that was divided into 5 identical rectangles. Given that the length of the cardboard is 54 cm, what is the area of the cardboard?

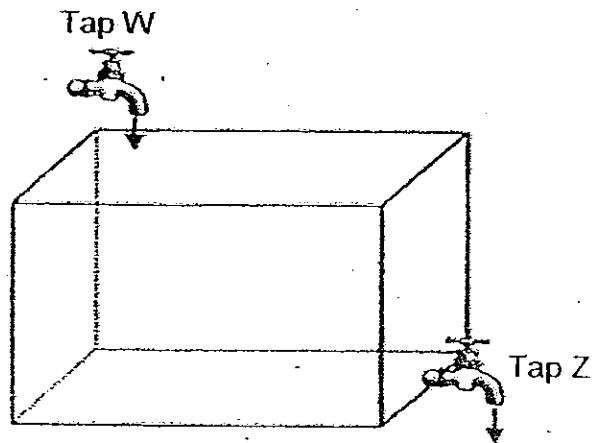


Do not write in this space.

Ans : _____ (4)



- 43) A tank is fitted with 2 taps, W and Z. Tap W takes 4 minutes to fill up the tank to the brim. Tap Z takes 2 minutes more than Tap W to drain all the water from the tank. If both taps were to be turned on at 11.50 a.m., at what time will the tank be filled completely?



Do not
write in
this space.

Ans : _____ (4)



44) Chester cycles from his place to the community centre for his yoga class every Sunday. If he were to cycle at 10 km/h, he would reach the community centre at 3 p.m. If he were to cycle at 15 km/h, he would reach there at 1 p.m.

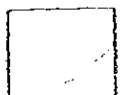
(a) How far does Chester have to cycle from his place to the community centre?

(b) At what average speed must he cycle if he wants to reach the community centre at 2 p.m.?

Do not
write in
this space.

Ans : (a) _____ (2)

(b) _____ (2)



- 45) Mrs Winder had some \$50 notes and \$10 notes. The number of \$50 notes was 45% that of \$10 notes. She spent 20% of the \$50 notes. As a result, she had 192 more \$10 notes than \$50 notes.
- (a) How much money did Mrs Winder spend?
- (b) Express the total value of the \$10 notes as a fraction of the total value of the \$50 notes left.

Do not
write in
this space.

Ans : (a) _____ (3)

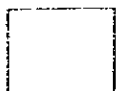
(b) _____ (2)



- 46) Troy's monthly allowance is \$42 more than Earl's. Earl spends \$54 more than Troy every month. Earl's savings is $\frac{1}{2}$ of Troy's savings. If Troy spends $\frac{3}{7}$ of his allowance every month, what is his allowance for the entire year?

Do not
write in
this space.

Ans : _____ (5)

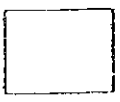


47) Among the commuters on board a train, the number of children to the number of adults was in the ratio 3 : 4. $\frac{2}{3}$ of the number of women was equal to $\frac{1}{4}$ of the number of men.

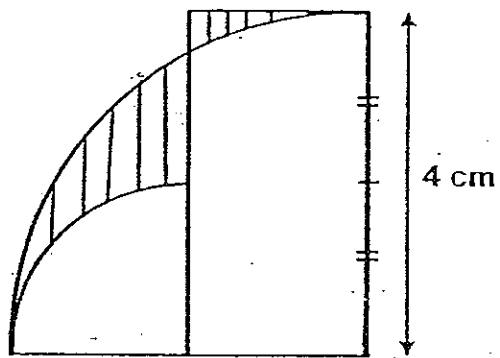
- (a) What is the ratio of the number of men to the number of women to the number of children?
- (b) When 108 commuters alighted from the train, the number of men decreased by $\frac{1}{2}$ and the number of children decreased by $\frac{1}{3}$. How many commuters were left on board the train?

Do not write in this space.

Ans : (a) _____ (2)
(b) _____ (3)



- 48) The figure below shows two quadrants and a rectangle. What is the difference in the area between the shaded parts? (Take $\pi = 3.14$)



Do not
write in
this space.

Ans : _____ (5)



End of Paper

Answer Sheets

CHIJ ST NICHOLAS Pri 6 SA2/2008 Maths

| | | | | | |
|----|---|-----|---|-----|---|
| 1. | 3 | 6. | 3 | 11. | 4 |
| 2. | 2 | 7. | 2 | 12. | 4 |
| 3. | 1 | 8. | 3 | 13. | 2 |
| 4. | 3 | 9. | 1 | 14. | 3 |
| 5. | 4 | 10. | 3 | 15. | 2 |

16. $\frac{1}{4}$

17. 15

18. \$297

19. 6

20. $(7\pi + 7)$

21. 5cm

22. 0930

23. 120g

24. 62.5%

25. $\frac{9}{2}$ ml

26. $\frac{3}{8}$

27. \$60

28. 1575cm³

29. 42cm³

30. \$21

31. 25

32. 612

33. \$175

34. 71

35. 9cm²

36. 39cm

37. a. $\$(4n+4.30)$

b. \$32.30

38. a. b.

c. 7.3cm

39. 518

40. 99°

41. 216

42. 2430cm²

43. 12:02pm

44. a. 60km

b. 12km/h

45. a. \$1350

b. $\frac{5}{9}$

46. \$4032

47. a. 32:12:33

b. 200

48. 1.23cm

