

ME / KO / CC / LYL / GAL

SECOND SEMESTRAL ASSESSMENT 2016

PRIMARY 4

MATHEMATICS

BOOKLET A

Name : _____ ()

13 October 2016

Class : Primary 4 SY/C/G/SE/P

Parent's Signature

There are 15 questions in this booklet.
SECTION A

Total Time : 1 h 45 min (Booklet A and B)

INSTRUCTIONS TO CANDIDATES

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

FOLLOW ALL INSTRUCTIONS CAREFULLY.

ANSWER ALL QUESTIONS.

CHECK THAT ALL MCQ ANSWERS ARE SHADED CORRECTLY IN THE OAS

This question paper consists of 5 printed pages.

Section A: (30 marks)

Questions 1 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.

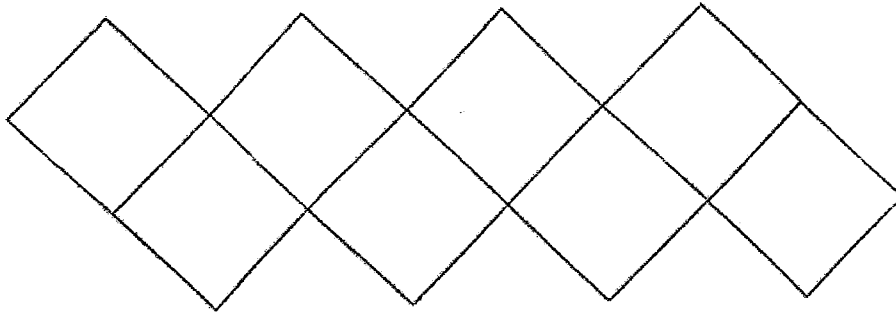
1. In the number 14 273, which digit is in the thousands place
(1) 1
(2) 2
(3) 3
(4) 4
2. Which of the following numbers when rounded to the nearest hundred becomes 51 200?
(1) 51 099
(2) 51 109
(3) 51 119
(4) 51 191
3. Which of the following are common factors of 6 and 9?
(1) 1 and 2
(2) 1 and 3
(3) 12 and 36
(4) 18 and 36
4. Arrange the following fractions from the greatest to the smallest

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

- | | (greatest) | | (smallest) |
|-----|---------------|---|-------------------------------|
| (1) | $\frac{1}{2}$ | , | $\frac{3}{4}$, $\frac{5}{6}$ |
| (2) | $\frac{1}{2}$ | , | $\frac{5}{6}$, $\frac{3}{4}$ |
| (3) | $\frac{3}{4}$ | , | $\frac{1}{2}$, $\frac{5}{6}$ |
| (4) | $\frac{5}{6}$ | , | $\frac{3}{4}$, $\frac{1}{2}$ |

5. In the number 43.21, the digit _____ is in the hundredths place.
- (1) 1
 - (2) 2
 - (3) 3
 - (4) 4
6. What is the number when 187.45 is rounded to 1 decimal place?
- (1) 187.4
 - (2) 187.5
 - (3) 188.4
 - (4) 188.5
7. Which of the following decimals is the smallest?
- (1) 4.05
 - (2) 4.15
 - (3) 4.015
 - (4) 4.051
8. I am a number between 1 to 50. I am a multiple of 4 and 6. When I am divided by 5, there will be a remainder of 4. What number am I?
- (1) 12
 - (2) 16
 - (3) 24
 - (4) 36

9. The figure below is made up of 8 identical squares. The area of the figure is 128 cm^2 . Find the length of each square.



- (1) 8 cm
(2) 9 cm
(3) 3 cm
(4) 4 cm
10. Casey placed the cake batter in the oven at 10 35 and she took the cake out at 11 20. How long did it take for the cake to bake?
- (1) 20 minutes
(2) 25 minutes
(3) 45 minutes
(4) 85 minutes
11. Rebecca had a total of \$10.50. After buying 3 files and 1 pen, she had \$3.50 left. Each file cost twice as much as a pen. How much does each pen cost?
- (1) \$1.00
(2) \$2.00
(3) \$1.75
(4) \$2.80

12. Mrs Morris sold $\frac{3}{4}$ of her pies. What fraction of the pies did she have left?

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

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

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

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

13. Which of the following figures has perpendicular lines?

(1) E

(2) N

(3) V

(4) Y

14. One cupcake costs \$1.50. For every 4 cupcakes bought, she receives the next cupcake free. Jane spent \$13.50 on cupcakes. How many cupcakes did she have altogether?

(1) 9

(2) 10

(3) 11

(4) 15

15. Linda gave $\frac{1}{2}$ of a pizza to her neighbour and ate $\frac{1}{3}$ of the pizza. Find the fraction of the pizza left.

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

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

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

(4) $\frac{5}{6}$

End of Section A

SECOND SEMESTRAL ASSESSMENT 2016

PRIMARY 4

MATHEMATICS

BOOKLET B

Name : _____ ()

13 October 2016

Class : Primary 4 SY/CJG/SE/P

		Marks attained	Max Mark
Booklet A	Section A		30
Booklet B	Section B		40
	Section C		30
Total			100

Parent's Signature

There are 28 questions in this booklet.
SECTION B and C

Total Time : 1 h 45 min (Booklet A and B)

INSTRUCTIONS TO CANDIDATES

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

FOLLOW ALL INSTRUCTIONS CAREFULLY.

ANSWER ALL QUESTIONS.

This question paper consists of 11 printed pages.

Section B: (40 marks)

Questions 16 to 35 carry 2 marks each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

16. Fill in the blank with the correct number in the number pattern below.

4242 , 4742 , 5242 , _____ , 6242 , 6742

Ans: _____

17. Write $\frac{3}{4}$ as a decimal.

Ans: _____

18. Which two of the following fractions below are in the simplest form?

X
 $\frac{1}{3}$, $\frac{2}{6}$, $\frac{3}{9}$, $\frac{5}{12}$

Ans: _____ and _____

19. Find the value of $\frac{1}{3} + \frac{5}{12}$. Express your answer in simplest form.

Ans: _____

20. Arrange the following numbers from the smallest to the greatest.

0.16 , 0.61 , 0.161, 0.601

Ans: _____ , _____ , _____ , _____
(smallest) (greatest)

21. Which of the fractions below is equivalent to 8?

$$\frac{10}{3}, \frac{16}{2}, \frac{20}{4}, \frac{25}{3}$$

Ans: _____

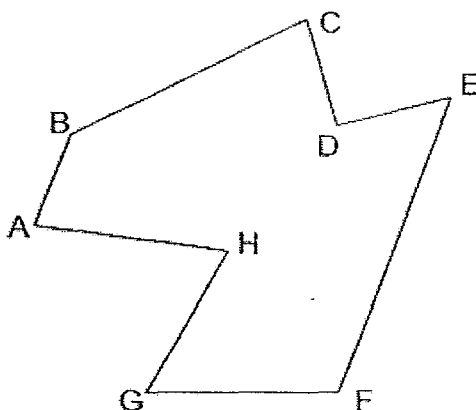
22. Find the value of 7.19×4 .

Ans: _____

23. Allyson had \$50. She spent $\frac{2}{5}$ of it on a toy and \$7 on a book. How much did she spend altogether?

Ans: \$ _____

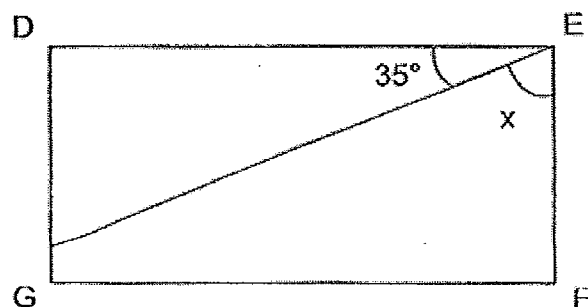
24. In the figure below, one of the lines is parallel to AB.
Which line is parallel to AB?



Ans: Line _____

Do not write
in this column

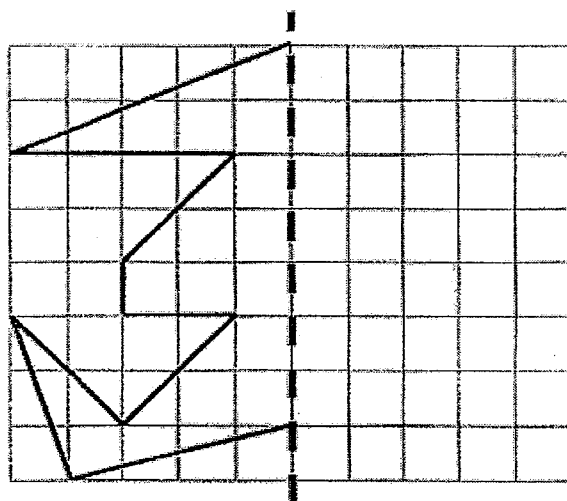
25. In the figure shown, DEFG is a rectangle. Find $\angle x$.



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Ans: _____°

26. Shade and complete the figure to form a symmetric shape along the dotted line.



27. Packet drinks were sold at 7 packets for \$8.40. If Madam Pang bought 42 packet drinks, how much did she spend?

Ans: \$ _____

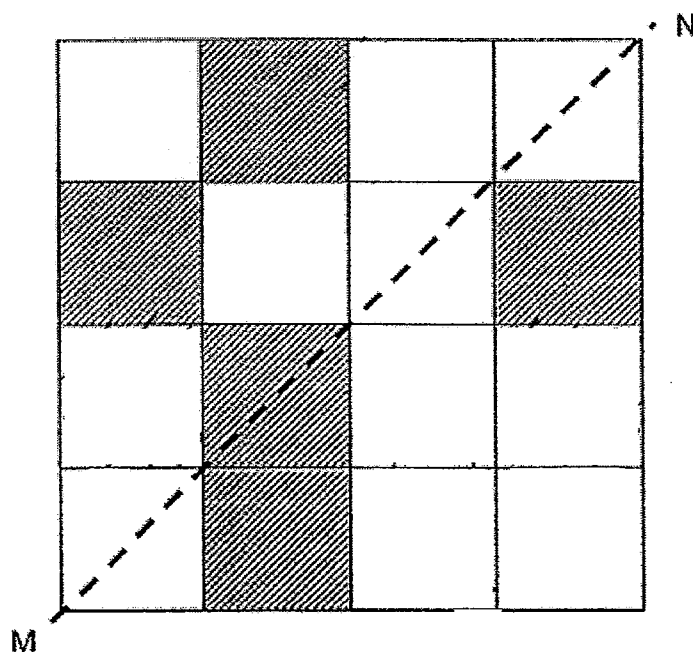
28. Siti has 3 m of ribbon. She used $\frac{1}{2}$ of it to tie a parcel. She used another $\frac{1}{4}$ m to make a bow. How much of the ribbon did she use?

Ans: _____ m

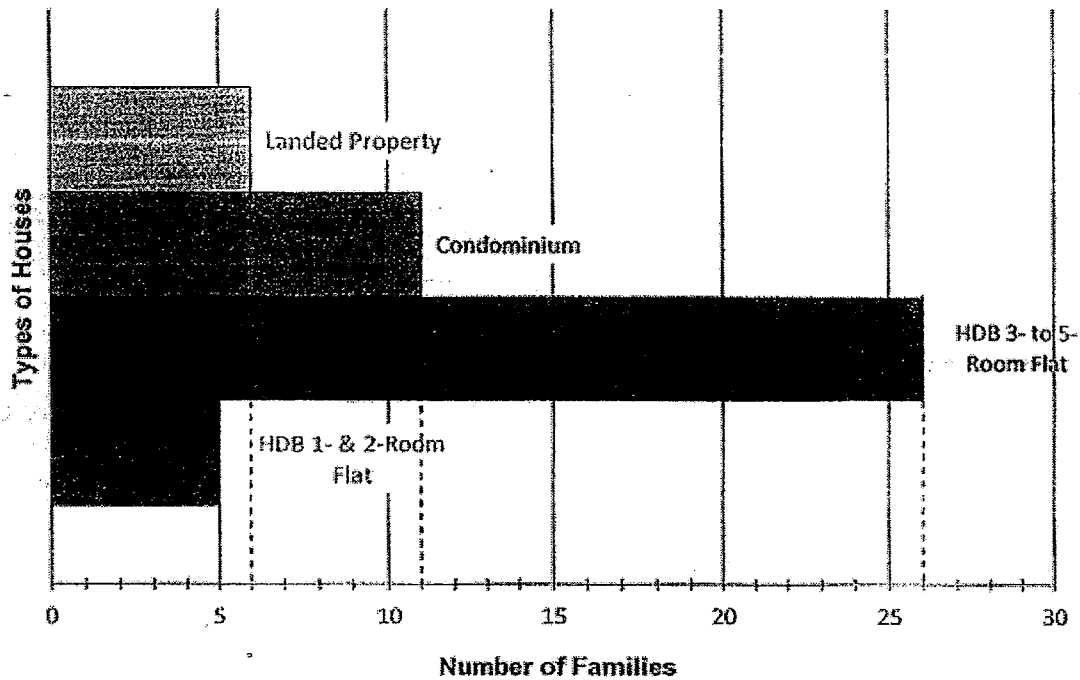
29. Molly baked 40 pies for a carnival. She sold $\frac{5}{8}$ of her pies. Each pie is sold at \$6 each. How much money did Molly receive?

Ans: \$ _____

30. Line MN is a line of symmetry. Shade 4 more squares in the space provided to complete a symmetrical figure.



A survey was done in 2015 to find out the type of houses people live in.
Study the graph carefully and answer questions 31 and 32.



31. Find the total number of families living in HDB flats.

Ans: _____

32. There are _____ more families living in condominiums than in landed properties.

Ans: _____

33. Mr Tang is 5 times as old as his daughter now. 3 years ago, his daughter was 7 years old. How old is Mr Tang now?

Do not write
in this column

Ans: _____ years old

34. The table below shows how Bryan spends his monthly allowance.

Expenditure	Amount (\$)
Transport	?
Food	82
Books	?
Total amount:	280

Given that the amount spent on transport is twice the amount spent on food.
Find the amount Bryan spends on books.

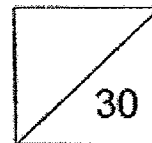
Ans;\$ _____

- 35 Draw and label $\angle BOC$ measuring 35° .



Name : _____ ()

Class: Primary 4 SY / C / G / SE / P



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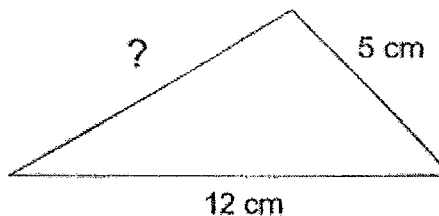
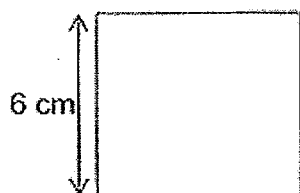
Section C: (30 marks)

For questions 36 to 43, show your working clearly in the space provided for each question and write your answer in the space provided. The number of marks available is shown in brackets [] at the end of each question or part-question.

36. In a game of treasure hunt, Ashley, Bob and Candice found 190 treasures altogether. Ashley found twice as many treasures as Bob. Candice found 30 less treasures than Bob. How many treasures did Bob find?

Ans: _____ [3]

37. A wire is bent to form the shape of a square with sides measuring 6 cm. The same wire is then bent to form the triangle shown below. (Diagrams are not drawn to scale)



- (a) What is the perimeter of the square?
(b) Find the missing length of the triangle.

Ans: (a) _____ [1]

(b) _____ [2]

38. 45 children attended a party. $\frac{4}{9}$ of the children were boys and the remaining children were girls. Each boy received 5 stickers and each girl received 8 stickers. How many stickers were given away?

Do not write
in this column

Ans: _____ [4]

39. Use the information below to answer question 39.

Set Meal A: \$16.50	Set Meal B: \$32.50	Set Meal C: \$69.50
For 2 persons	For 4 persons	For 8 persons
<ul style="list-style-type: none"> • 2 plates of spaghetti • 2 fish fingers • 2 salad • 1 small pizza 	<ul style="list-style-type: none"> • 4 plates of spaghetti • 4 fish fingers • 4 salads • 1 medium pizza 	<ul style="list-style-type: none"> • 6 plates of spaghetti • 8 fish fingers • 8 salad • 2 large pizzas

Mrs Lee wants to order food for 14 children at a party. Each child must get a plate of spaghetti. What is the least amount of money she has to spend for the party?

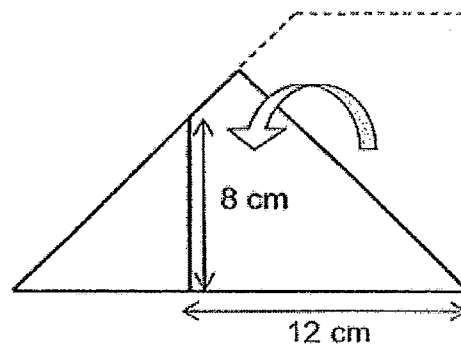
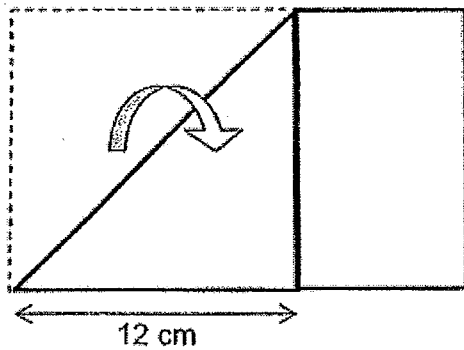
Ans: _____ [4]

40. A rectangular piece of paper was folded twice as shown below.

(a) Find the perimeter of the paper before it was folded.

(b) Find the area of the rectangular piece of paper.

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in this column



Ans: (a) _____ [2]

(b) _____ [2]

41. Gordan and Harry had 340 marbles altogether. After Gordan gave away $\frac{2}{5}$ of his marbles and Harry gave away 20 of his marbles, they had the same number of marbles left. How many marbles did Harry have in the end?

Do not write
in this column

Ans: _____ [4]

42. Minnie was in school from 07 30 to 15 15. She had a 15 minute snack break, a 30 minute recess and a 35 minute lunch break. The rest of the time were spent attending classes.
- (a) How much time did Minnie spend attending classes?

After school, Minnie took 40 minutes to reach home.

- (b) What time did Minnie reach home? Leave your answer in 24-hour clock.

Ans: (a) _____ [2]

(b) _____ [2]

43. 40 pupils in class 4A scored 380 points in a contest. Each girl scored 10 points and each boy scored 8 points. How many girls are there in class 4A?

Do not write
in this column

Ans: _____



End of paper.
Please check your work.

ANSWER SHEET

EXAM PAPER 2016 (P4)

SCHOOL : SCGS

SUBJECT : MATHEMATICS

TERM : SA2

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

Section B: (40 marks)

Corrections SA 2

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in this column

Questions 16 to 35 carry 2 marks each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

16. Fill in the blank with the correct number in the number pattern below.

$$\begin{array}{ccccccc}
 & & & +500 & & & \\
 & & & \swarrow & & & \\
 4242 & , & 4742 & , & 5242 & , & \underline{5742} & , & 6242 & , & 6742 \\
 & \nearrow & \nearrow & & \nearrow & \nearrow & & & & & \\
 & +500 & +500 & & +500 & +500 & & & & &
 \end{array}$$

Ans: 5742

17. Write $\frac{3}{4}$ as a decimal.

$$\frac{3 \times 25}{4 \times 25} = \frac{75}{100}$$

$$= 0.75$$

Ans: 0.75

18. Which two of the following fractions below are in the simplest form?

$$\begin{array}{cccc}
 \checkmark & \times & \times & \checkmark \\
 \left(\frac{1}{3}\right) & , & \frac{2}{6} & , & \frac{3}{9} & , & \left(\frac{5}{12}\right) \\
 & & \Downarrow & & \Downarrow & & \\
 & & \frac{1}{3} & & \frac{1}{3} & &
 \end{array}$$

Ans: $\frac{1}{3}$ and $\frac{5}{12}$

19. Find the value of $\frac{1}{3} + \frac{5}{12}$. Express your answer in simplest form.

$$\begin{aligned}
 \frac{4}{12} + \frac{5}{12} &= \frac{9}{12} \\
 &= \frac{3}{4}
 \end{aligned}$$

Ans: $\frac{3}{4}$

20. Arrange the following numbers from the smallest to the greatest.

0.16 , 0.61 , 0.161, 0.601

Ans: 0.16 , 0.161 , 0.601 , 0.61
(smallest) (greatest)

21. Which of the fractions below is equivalent to 8?

Do not write
in this column

$$\frac{10}{3}, \frac{16}{2}, \frac{20}{4}, \frac{25}{3}$$

$$= 3\frac{1}{3}, 8, 5, 8\frac{2}{3}$$

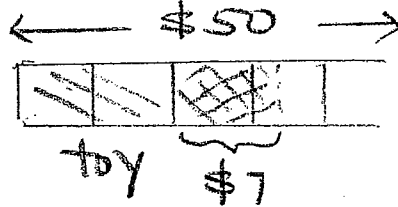
Ans: $\frac{16}{2}$

22. Find the value of 7.19×4 .

$$\begin{array}{r} 7.19 \\ \times 4 \\ \hline 28.76 \end{array}$$

Ans: 28.76

23. Allyson had \$50. She spent $\frac{2}{5}$ of it on a toy and \$7 on a book. How much did she spend altogether?



5u — \$50

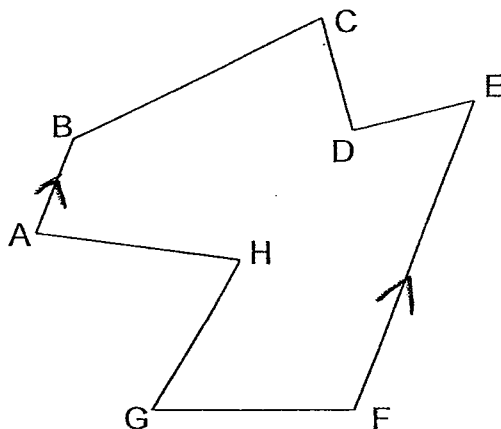
1u — $\$50 \div 5$
= \$10

2u — $\$10 \times 2 = \20

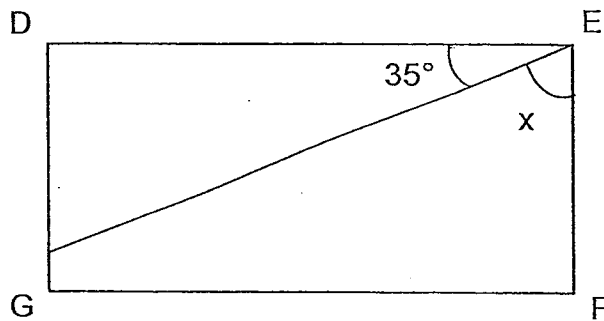
Total
sp — $\$(20 + 7) = \27

Ans: \$ 27

24. In the figure below, one of the lines is parallel to AB.
Which line is parallel to AB?



25. In the figure shown, DEFG is a rectangle. Find $\angle x$.

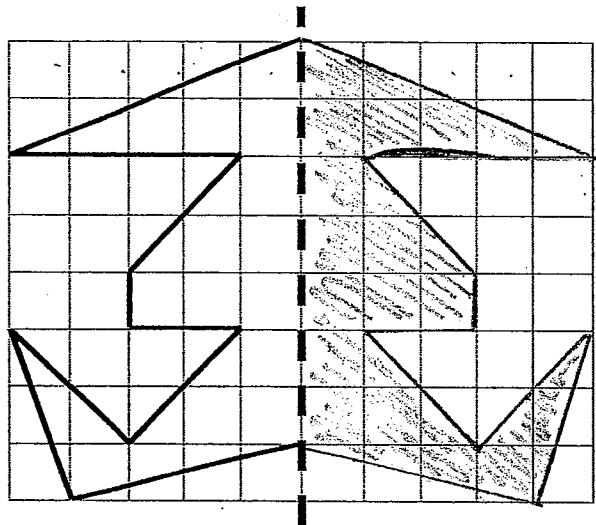


$$\angle x = (90 - 35)^\circ$$

$$= 55^\circ$$

Ans: 55°

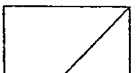
26. Shade and complete the figure to form a symmetric shape along the dotted line.



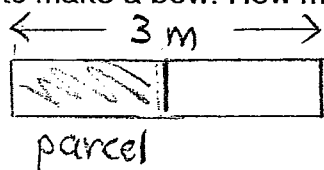
27. Packet drinks were sold at 7 packets for \$8.40. If Madam Pang bought 42 packet drinks, how much did she spend?

$$\begin{array}{rcl} 7 \text{ pkts} & \text{---} & \$8.40 \\ \times 6 & & \times 6 \\ \hline 42 \text{ pkts} & \text{---} & \$50.40 \end{array}$$

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28. Siti has 3 m of ribbon. She used $\frac{1}{2}$ of it to tie a parcel. She used another $\frac{1}{4}$ m to make a bow. How much of the ribbon did she use?

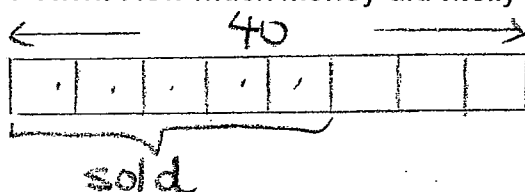


$$\begin{aligned} \text{Parcel} &= \frac{1}{2} \times 3 \text{ m} \\ &= 1\frac{1}{2} \text{ m} \end{aligned}$$

$$\begin{aligned} \text{length used} &= \frac{1}{2} + \frac{1}{4} \\ &= 1\frac{3}{4} \text{ m} \end{aligned}$$

Ans: $1\frac{3}{4}$ m

29. Molly baked 40 pies for a carnival. She sold $\frac{5}{8}$ of her pies. Each pie is sold at \$6 each. How much money did Molly receive?

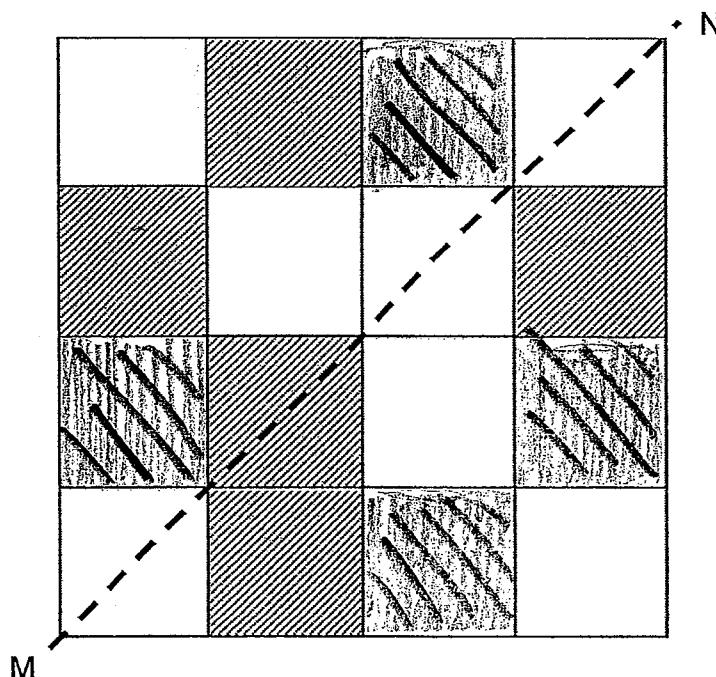


$$\begin{aligned} 8u &= 40 \\ 1u &= 40 \div 8 = 5 \\ 5u &= 5 \times 5 = 25 \end{aligned}$$

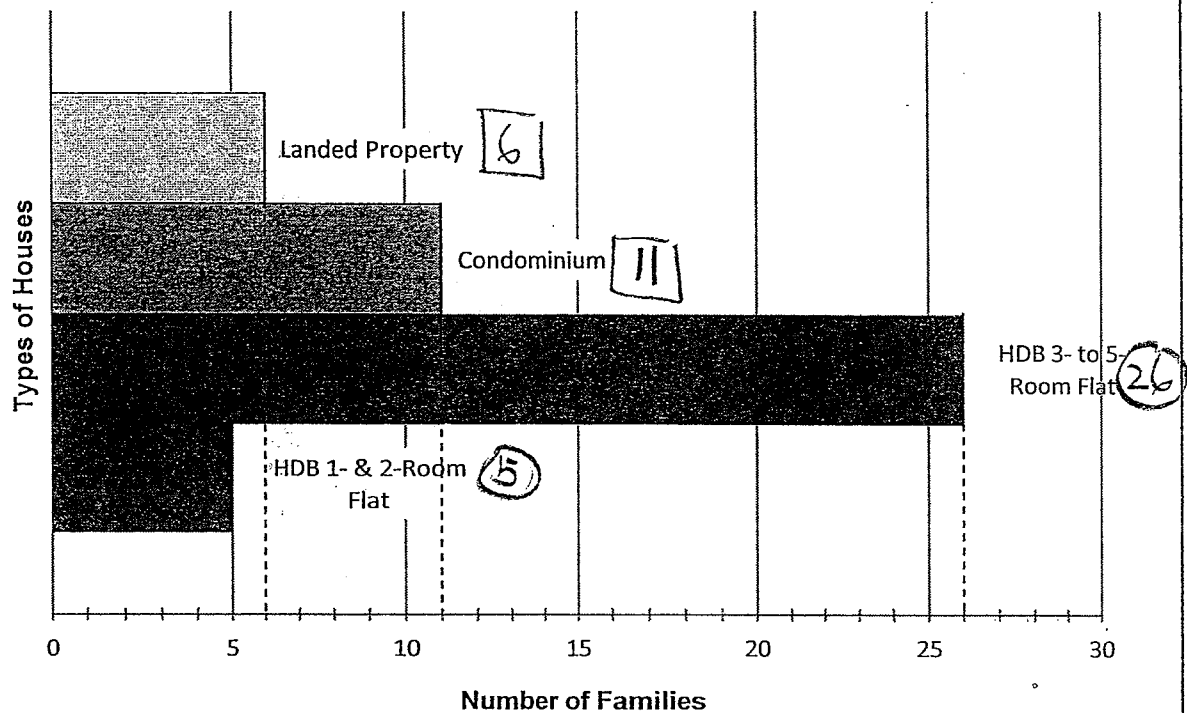
$$\begin{aligned} \text{Receive} &= 25 \times \$6 \\ &= \$150 \end{aligned}$$

Ans: \$ 150

30. Line MN is a line of symmetry. Shade 4 more squares in the space provided to complete a symmetrical figure.



A survey was done in 2015 to find out the type of houses people live in.
Study the graph carefully and answer questions 31 and 32.



31. Find the total number of families living in HDB flats.

$$5 + 26 = 31$$

Ans: 31

32. There are _____ more families living in condominiums than in landed properties.

$$11 - 6 = 5$$

Ans: 5

33. Mr Tang is 5 times as old as his daughter now. 3 years ago, his daughter was 7 years old. How old is Mr Tang now?



daughter — 7 + 3
now = 10

Mr T — 10×5
= 50

Ans: 50 years old

34. The table below shows how Bryan spends his monthly allowance.

Expenditure	Amount (\$)
Transport	? 24
Food	82 14
Books	?
Total amount:	280

Given that the amount spent on transport is twice the amount spent on food.

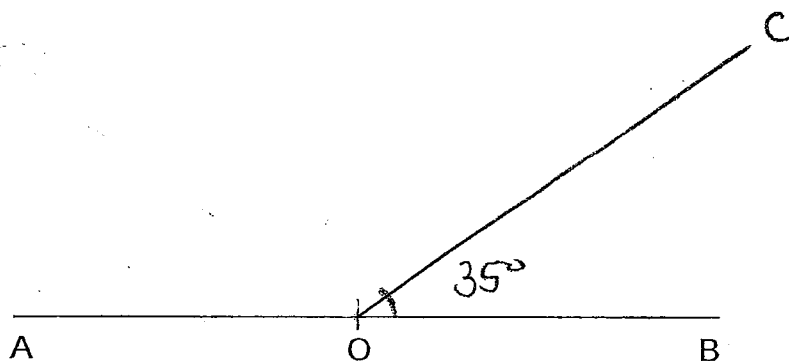
Find the amount Bryan spends on books.

1u — 82
2u — 82×2
= 164

books — $280 - 164 - 82$
= 34

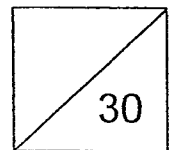
Ans: \$ 34

35. Draw and label $\angle BOC$ measuring 35° .



Name : _____ ()

Class: Primary 4 SY / C / G / SE / P

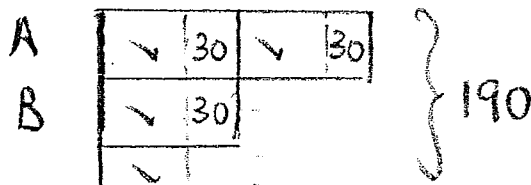


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Section C: (30 marks)

For questions 36 to 43, show your working clearly in the space provided for each question and write your answer in the space provided. The number of marks available is shown in brackets [] at the end of each question or part-question.

36. In a game of treasure hunt, Ashley, Bob and Candice found 190 treasures altogether. Ashley found twice as many treasures as Bob. Candice found 30 less treasures than Bob. How many treasures did Bob find?



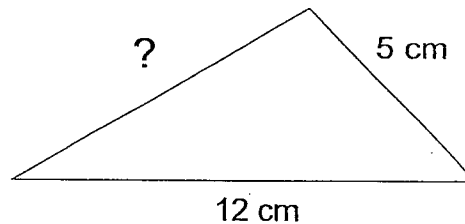
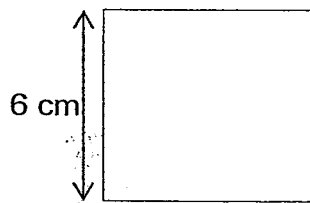
$$30 \times 3 = 90$$

$$190 - 90 = 100$$

$$\begin{aligned} 4u &= 100 \\ 1u &= 100 \div 4 \\ &= 25 \\ \text{Bob} &= 25 + 30 \\ &= 55 \end{aligned}$$

Ans: 55 [3]

37. A wire is bent to form the shape of a square with sides measuring 6 cm. The same wire is then bent to form the triangle shown below. (Diagrams are not drawn to scale)



- (a) What is the perimeter of the square?
(b) Find the missing length of the triangle.

$$\begin{aligned} \text{a) } P \text{ of sq} &= 6 \times 4 \\ &= 24 \text{ cm} \end{aligned}$$

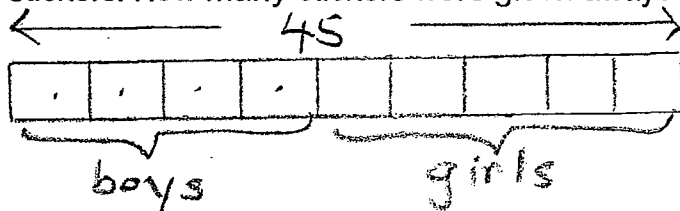
$$\text{b) } P. \text{ of } \Delta = 24$$

$$\begin{aligned} \text{Missing length} &= 24 - 12 - 5 \\ &= 7 \text{ cm} \end{aligned}$$

Ans: (a) 24 cm [1]

(b) 7 cm [2]

38. 45 children attended a party. $\frac{4}{9}$ of the children were boys and the remaining children were girls. Each boy received 5 stickers and each girl received 8 stickers. How many stickers were given away?



$$9u = 45$$

$$1u = 45 \div 9 = 5$$

$$\text{boys} = 4 \times 5 = 20$$

$$20 \times 5 = 100$$

$$\text{Girls} = 5 \times 5 = 25$$

$$25 \times 8 = 200$$

$$\begin{aligned} \text{Total given away} &= 100 + 200 \\ &= 300 \end{aligned}$$

Ans: 300 [4]

39. Use the information below to answer question 39.

Set Meal A: \$16.50	Set Meal B: \$32.50	Set Meal C: \$69.50
For 2 persons	For 4 persons	For 8 persons
<ul style="list-style-type: none"> 2 plates of spaghetti 2 fish fingers 2 salad 1 small pizza 	<ul style="list-style-type: none"> 4 plates of spaghetti 4 fish fingers 4 salads 1 medium pizza 	<ul style="list-style-type: none"> 6 plates of spaghetti 8 fish fingers 8 salad 2 large pizzas

Mrs Lee wants to order food for 14 children at a party. Each child must get a plate of spaghetti. What is the least amount of money she has to spend for the party?

$$\begin{aligned} &7 \times \text{Set A} \\ &= \$16.50 \times 7 \\ &= \$115.50 \end{aligned}$$

$$\begin{aligned} &3 \text{ sets B} + 1 \text{ set A} \\ &= \$ (32.50 \times 3) + \$16.50 \\ &= \$114 \quad \checkmark \end{aligned}$$

$$\begin{aligned} &5 \text{ sets A} + 1 \text{ set B} \\ &= \$ (82.50 + 32.50) \\ &= \$115 \end{aligned}$$

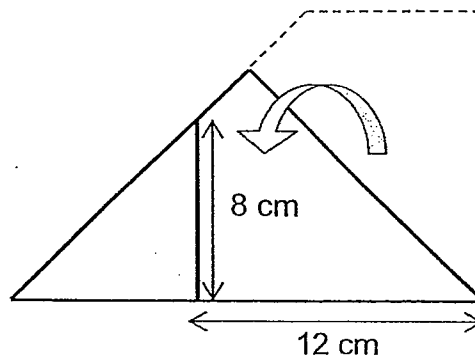
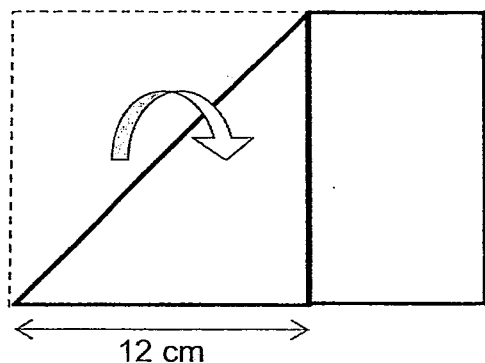
Ans: 3 sets B and 1 set A [4] 8

40. A rectangular piece of paper was folded twice as shown below.

(a) Find the perimeter of the paper before it was folded.

(b) Find the area of the rectangular piece of paper.

Do not write
in this column



$$\text{Length} \text{ --- } 12 + 8 \\ = 20$$

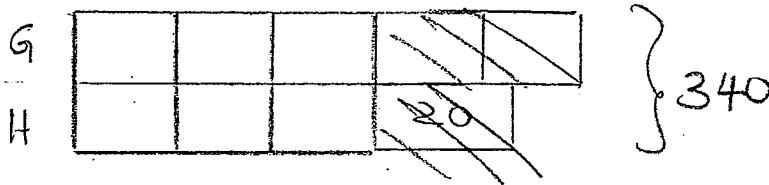
$$\text{a) } P \text{ --- } 20 + 20 + 12 + 12 \\ = 64 \text{ cm}$$

$$\text{b) } A \text{ --- } 20 \times 12 \\ = 240 \text{ cm}^2$$

Ans: (a) 64 cm [2]

(b) 240 cm² [2]

41. Gordan and Harry had 340 marbles altogether. After Gordan gave away $\frac{2}{5}$ of his marbles and Harry gave away 20 of his marbles, they had the same number of marbles left. How many marbles did Harry have in the end?



$$340 - 20 = 320$$

$$8u \text{ --- } 320$$

$$1u \text{ --- } 320 \div 8$$

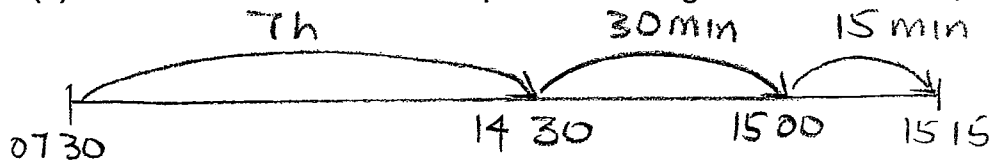
$$= 40$$

$$3u \text{ --- } 40 \times 3 = 120$$

Ans: 120 [4]

42. Minnie was in school from 07 30 to 15 15. She had a 15 minute snack break, a 30 minute recess and a 35 minute lunch break. The rest of the time were spent attending classes.

(a) How much time did Minnie spend attending classes?



$$\text{Total time} \text{ --- } 7h + 30 \text{ min} + 15 \text{ min} \\ = 7h 45 \text{ min}$$

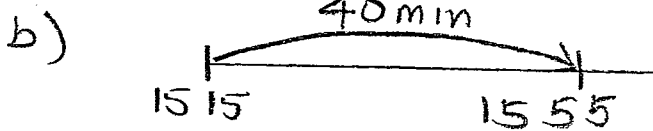
After school, Minnie took 40 minutes to reach home.

(b) What time did Minnie reach home? Leave your answer in 24-hour clock.

$$15 \text{ min} + 30 \text{ min} + 35 \text{ min} = 80 \text{ min} \\ = 1h 20 \text{ min}$$

$$\text{a) } 7h 45 \text{ min} - 1h 20 \text{ min} \\ = 6h 25 \text{ min}$$

Ans: (a) 6h 25 min [2]



(b) 15 55 [2]

43. 40 pupils in class 4A scored 380 points in a contest. Each girl scored 10 points and each boy scored 8 points. How many girls are there in class 4A?

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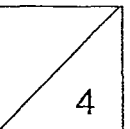
40

Boys	Girls	Total 380	Check
20×8 $= 160$	20×10 $= 200$	$160 + 200$ $= 360$	X
15×8 $= 120$	25×10 $= 250$	$120 + 250$ $= 370$	X
10×8 $= 80$	30×10 $= 300$	$80 + 300$ $= 380$	✓

30 girls.

Ans: 30

[4]



End of paper.

Please check your work.

