

SINGAPORE CHINESE GIRLS' SCHOOL
SECOND SEMESTRAL EXAMINATION 2012

PRIMARY 5

MATHEMATICS
PAPER 1

BOOKLET A

Name : _____ ()

Class : Primary 5

		Marks attained	Max Mark
Paper 1	Booklet A		20
	Booklet B		20
Paper 2			60
Total Marks			100

15 Questions
20 Marks

Total Time for Booklets A and B: 50 min

INSTRUCTIONS TO CANDIDATES

Do not open this booklet until you are told to do so.
Follow all instructions carefully.
Answer all questions.
You are not allowed to use a calculator

Booklet A

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.

(20 marks)

1. In 3 519 742, the value of the digit '1' is _____.

- (1) 1×1000
- (2) $1 \times 10\,000$
- (3) $1 \times 100\,000$
- (4) $1 \times 1\,000\,000$

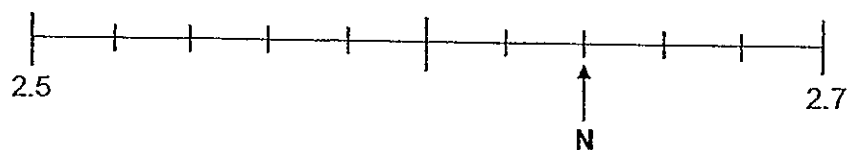
2. $9\ell\,2\,m\ell =$ _____

- (1) 9.2ℓ
- (2) 9.02ℓ
- (3) 9.002ℓ
- (4) 9.0002ℓ

3. How many ninths are there in $2\frac{2}{3}$?

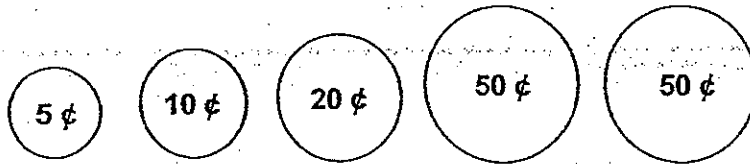
- (1) 12
- (2) 20
- (3) 21
- (4) 24

4. Study the following number line carefully. What is the value of N?



- (1) 2.552
- (2) 2.57
- (3) 2.602
- (4) 2.64

5. Mei found that she was left with the following coins in her pocket.



She took out two of the coins and spent them on some snacks. Which of the following amounts could not be the amount that she spent on the snacks?

- (1) \$0.55
 - (2) \$0.70
 - (3) \$0.80
 - (4) \$1.00
6. There are 80 strawberry-flavoured and chocolate-flavoured sweets in a container. 56 of them are strawberry-flavoured. What percentage of the sweets is chocolate-flavoured?
- (1) 24%
 - (2) 30%
 - (3) 56%
 - (4) 70%
7. Arrange the following numbers in ascending order.

4.1, 4.019, 4.109, 4.19

- (1) 4.1, 4.19, 4.109, 4.019
- (2) 4.019, 4.1, 4.109, 4.19
- (3) 4.1, 4.019, 4.19, 4.109
- (4) 4.019, 4.109, 4.19, 4.1

8. Eight children shared $\frac{4}{5}$ of a cake equally among themselves. What fraction of the cake did each child get?

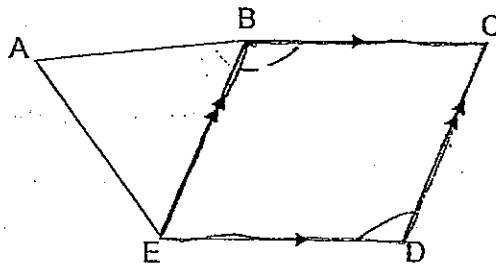
(1) $\frac{1}{5}$

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

(3) $\frac{1}{10}$

(4) $\frac{5}{32}$

9. In the figure below, ABE is an equilateral triangle. $BC \parallel ED$ and $BE \parallel CD$. Which of the following statements is true?



- (1) $\angle ABE = \angle BED$
 (2) $\angle EBC = \angle EDC$
 (3) $\angle ABE + \angle EBC = 180^\circ$
 (4) $\angle AED + \angle EAB = 180^\circ$
10. Isaac, Javier and Kieran shared a sum of money in the ratio 2 : 4 : 3. If they shared a total of \$450, how much more money did Javier receive than Kieran?

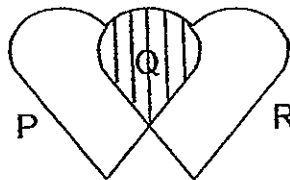
- (1) \$50
 (2) \$100
 (3) \$150
 (4) \$200

11. Aishah and Brenda spent 10 minutes packing apples into bags. Every minute, Aishah packed 4 more apples than Brenda. If they packed a total of 244 apples, how many apples did Brenda pack?

(1) 102
(2) 120
(3) 122
(4) 142

12. In the figure below, P and R are two identical hearts. The area of P is 5 times the area of Q. What is the ratio of the area of the shaded part to the area of the whole figure?

(1) 1 : 5
(2) 1 : 8
(3) 1 : 9
(4) 1 : 10



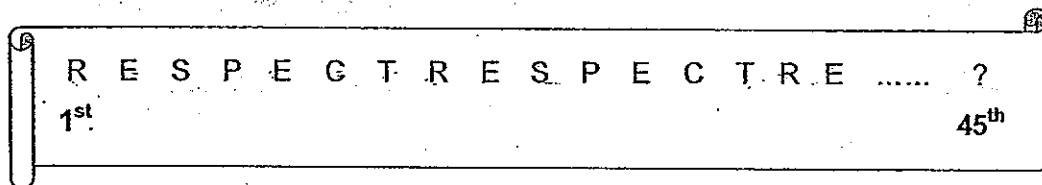
13. Given that $18.25 \times 4 = 73$. If $182.5 \times \boxed{} = 73$, what is the missing number in the $\boxed{}$?

(1) 0.4
(2) 0.04
(3) 40
(4) 400

14. Sue had an equal number of pink and yellow clips. She gave away 22 pink clips and bought another 36 yellow clips. The number of pink clips becomes $\frac{1}{2}$ the number of yellow clips. How many pink clips did she have at first?

(1) 29
(2) 36
(3) 58
(4) 80

15. The banner below shows the first 16 letters of a pattern. Which letter is in the 45th position?



- (1) C
- (2) P
- (3) S
- (4) T

SINGAPORE CHINESE GIRLS' SCHOOL
SECOND SEMESTRAL EXAMINATION 2012

PRIMARY 5
MATHEMATICS
PAPER 1
BOOKLET B

Name : _____ ()

Class : Primary 5

Paper 1	Mark attained	Max Mark
Booklet B		20

15 Questions

20 Marks

Total Time for Booklets A and B: 50 min

INSTRUCTIONS TO CANDIDATES

Do not open this booklet until you are told to do so.

Follow all instructions carefully.

Answer all questions.

You are not allowed to use a calculator

Booklet B

Name: _____ () Class: P5 SY / C / G / SE / P

Do not write in
this column

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 value of 3.25×20 .

Ans: _____

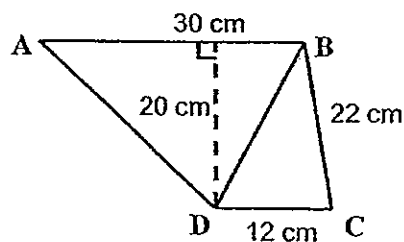
17. Jesse paid 7% GST when he bought a bed. If the GST amounted to \$56, what is the price of the bed, excluding GST?

Ans: \$ _____

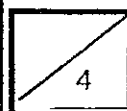
18. Mr Wong had \$2000. He spent 10% of his money on clothings and 20% of it on a washing machine. How much money had he left?

Ans: \$ _____

19. In the figure below, not drawn to scale, ABCD is a trapezium.
Given that $AB \parallel DC$, find the area of triangle BCD.



Ans: _____ cm^2



20. Ann and Bella have some apples. 25% of Ann's apples is equal to 40% of Bella's apples. If Bella has 60 apples fewer than Ann, how many apples does Ann have?

Ans: _____

21. Mrs Tan had $\frac{4}{9}$ m of cloth. She used $\frac{1}{4}$ of it to sew a pencil case. How much cloth had she left? (Express your answer in the simplest form)

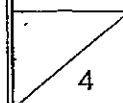
Ans: _____ m

22. When A is multiplied by 4, the product is 8 times of 7.
What is A?

Ans: _____

23. Roy, Siva and Taufiq shared a packet of marbles. The ratio of Roy's marbles to Siva's marbles is 1 : 2. The ratio of Siva's marbles to Taufiq's marbles is 4 : 5. What is the ratio of Roy's marbles to Taufiq's marbles?

Ans: _____



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this column

24. The sum of two numbers is 66. The smaller number is $\frac{1}{2}$ of the larger number.

What is the value of the smaller number?

Ans: _____

25. May made 3 cuts on a piece of ribbon that was 48 cm long. Assuming the pieces of ribbons are of equal length, find the length of each piece of ribbon.

Ans: _____ cm



Questions 26 to 30 carry 2 marks each. Show your working clearly in the space for each question and write your answers in the spaces provided.

For questions which require units, give your answers in the units stated. (10 marks)

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26. 8 lamp posts are equally spaced along a street. If the distance between the first lamp post and the third lamp post is 300 m, what is the distance between the first lamp post and the eighth lamp post?

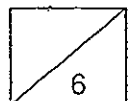
Ans: _____ m

27. Jane had some sweets and chocolates in the ratio 3 : 5. If she ate 6 pieces of chocolates, she would have the same number of sweets and chocolates left. Find the total number of sweets and chocolates that Jane had.

Ans: _____

28. Ali is $\frac{1}{5}$ as old as his uncle now. In 8 years' time, he will be $\frac{1}{3}$ as old as his uncle.
How old is Ali now?

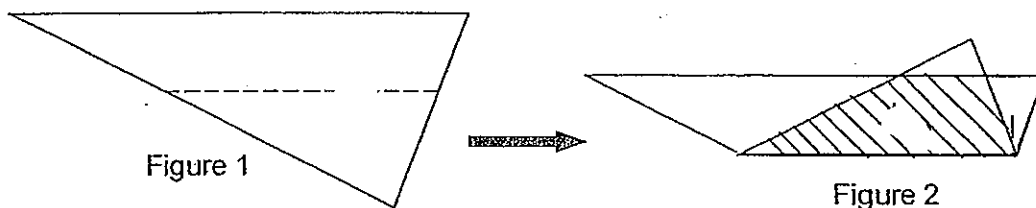
Ans: _____ years old



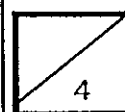
29. Rina, Sam and Tricia had an equal number of pencils. After Rina and Sam each gave the same number of pencils to Tricia, the total number of pencils that Rina and Sam had was the same as the number of pencils Tricia had. If Tricia had 24 pencils in the end, how many pencils did each of them have at first?

Ans: _____

30. Figure 1 shows a triangle. When it is folded along the dotted line as shown in Figure 2, its area becomes $\frac{5}{9}$ of the area of the original triangle in Figure 1. If the area of the shaded part in Figure 2 is 20 cm^2 , what is the area of the original triangle?



Ans: _____ cm^2



End of Paper 1

SINGAPORE CHINESE GIRLS' SCHOOL
SECOND SEMESTRAL EXAMINATION 2012

PRIMARY 5

MATHEMATICS
PAPER 2

Name : _____ ()

Class : Primary

Paper 2	Mark	Max Mark
		60

Parent's Signature

18 Questions
60 Marks

Total Time For Paper 2: 1 h 40 min

INSTRUCTIONS TO CANDIDATES

Do not open this booklet until you are told to do so.

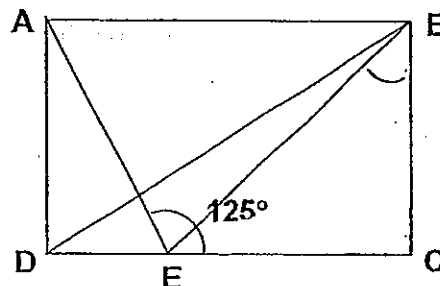
Follow all instructions carefully.

Answer all questions.

Questions 1 to 5 carry 2 marks each. Show your working clearly in the space below each question and write your answers in the space provided. For questions which require units, give your answers in the units stated. (10 marks)

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1. The diagram below is not drawn to scale. ABCD is a rectangle. BC = CE and $\angle AEC = 125^\circ$. Find $\angle AEB$.



Ans: _____°

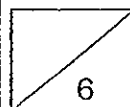
2. A piece of white ribbon is 50 cm longer than a piece of black ribbon. The length of the black ribbon is 2.54 m. What is the total length of the black and white ribbons?

Ans: _____ m

3. What is the missing number in the box?

$$2\,842 \div 7 = \boxed{} \times 7 + 7$$

Ans: _____

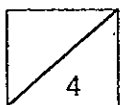


4. A box containing 40 identical marbles weighs 4 kg. The same box containing 55 identical marbles weighs 5.08 kg. Find the mass of each marble.

Ans: _____ g

5. Sharon wants to buy 12 files but she is short of \$4.20. If she buys 7 files, she will have \$8.80 left. How much does each file cost?

Ans: \$ _____



For questions 6 to 18, show your working clearly in the space below each question and write your answers in the spaces provided. The number of marks awarded is shown in brackets [] at the end of each question or part-question. (50 marks)

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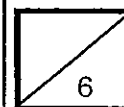
6. A group of pupils scored an average of 72 marks for a test. When the scores of two additional pupils, totalling 180, are included, the average score of the group becomes 74 marks.

How many pupils were there in the group at first?

[3]

7. Lorraine keeps some 20-cent and 50-cent coins in a box. The coins add up to \$15.80. If there are 5 more 50-cent coins than 20-cent coins in the box, how many 50-cent coins are there in the box?

Ans: [3]

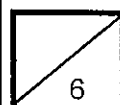


8. Farmer Tim has a total of 60 horses and chickens in his farm. If the horses and chickens have 168 legs altogether, how many horses does he have in his farm?

Ans: _____ [3]

9. A pineapple cost 4 times as much as a pear. Mingli spent $\frac{5}{7}$ of her money on some pineapples and $\frac{1}{2}$ of the remaining money on 16 pears. How many pineapples did she buy?

Ans: _____ [3]

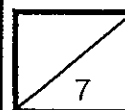


10. Ali and Ben had different amount of money. If Ali spent \$35 each week and Ben spent \$70 each week, Ali would still have \$920 left when Ben had spent all his money. If Ali spent \$70 each week and Ben spent \$35 each week, Ali would still have \$380 left when Ben had spent all his money.
How much money did Ben have at first?

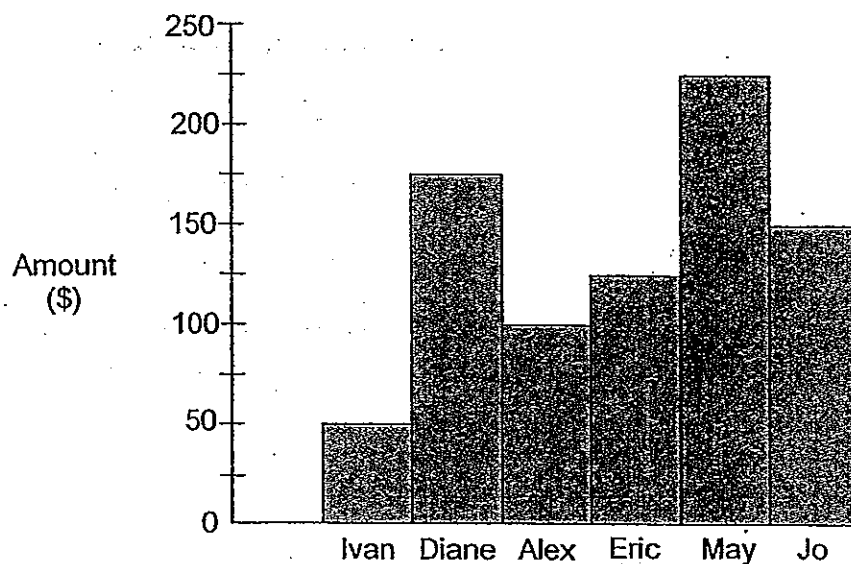
Ans: _____ [3]

11. A survey carried out by a school revealed that 1185 of its pupils walk to school every day. 60% of the remaining pupils go to school by bus while the rest of the pupils go to school by car. Given that $\frac{1}{5}$ of the school enrolment goes to school by car, what is the enrolment of the school?

Ans: _____ [4]



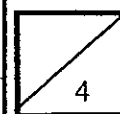
12. The line graph below shows the amount of money raised by six children during a fund-raising event. Study the graph carefully and answer the questions that follow.



- (a) What was the total amount of money raised by the children?
- (b) If the children's target was to raise \$1000, what percentage of the targeted amount were they short of?

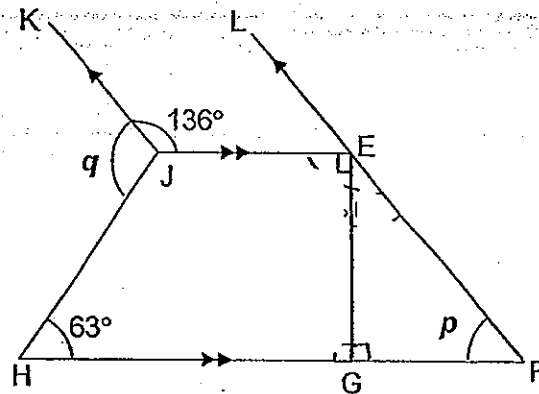
Ans:(a) _____ [1]

(b) _____ [3]



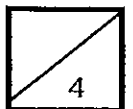
13. In the figure below, not drawn to scale, JEFH is a trapezium.
 $JK \parallel EL$ and $JE \parallel HF$. Find the values of $\angle p$ and $\angle q$.

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Ans: $\angle p =$ _____ [2]

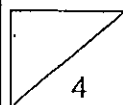
$\angle q =$ _____ [2]



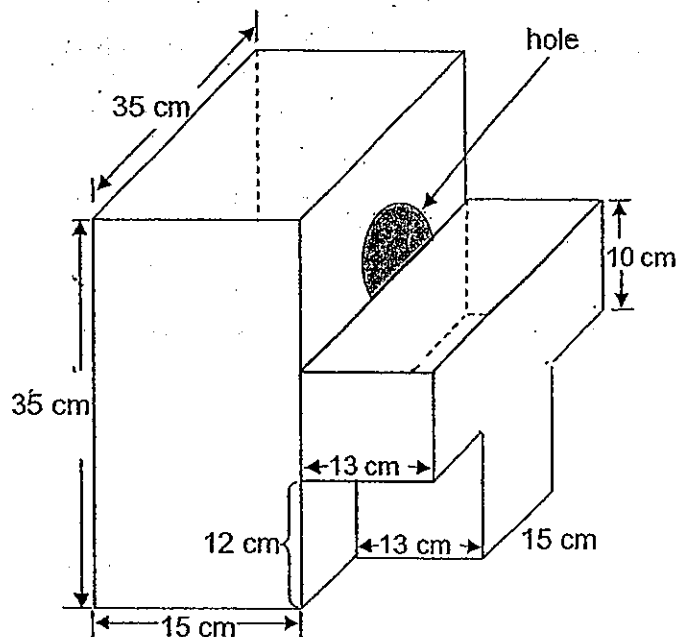
14. Miss Devi bought 3 kg of strawberries and 7 kg of prunes. Miss Tay bought 7 kg of strawberries and 3 kg of prunes. Miss Tay paid \$20 more than Miss Devi. If 1 kg of strawberries cost \$19, what was the total cost of 1 kg of strawberries and 1 kg of prunes?

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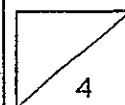
Ans: _____ [4]



15. A cuboidal tank measuring 15 cm by 35 cm by 35 cm is attached to a T-shaped tank as shown below (not drawn to scale). 16 litres of water is poured into the cuboidal tank. As the water rises and reaches the hole, it flows through the hole into the T-shaped tank. Find the height of the water level in the T-shaped tank. (Correct your answer to 2 decimal places)

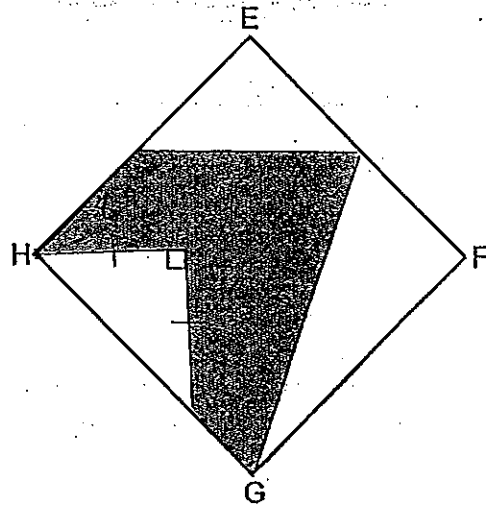


Ans: _____ [4]

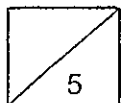


16. EFGH is a square of side 16 cm. J and K are the mid-points of EF and EH respectively. Find the area of the shaded part.

Do not write in
this column



Ans: _____ [5]

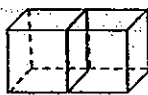


17. The diagram below shows a series of cubes formed using identical rods.

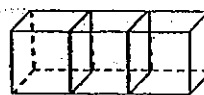
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Pattern 1.



Pattern 2



Pattern 3

Pattern 1 : 12 rods.

Pattern 2 : 20 rods.

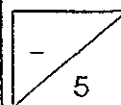
Pattern 3 : 28 rods.

- (a) How many rods are added to form one more cube in the next pattern?
(b) How many rods are needed to form cubes in Pattern 10?
(c) If 148 rods were used to form cubes in one of the patterns, which pattern will that be?

Ans: (a) _____ [1]

(b) _____ [2]

(c) _____ [2]



18. Dinesh, Eric and Farid were required to collect an equal number of flyers for distribution. Dinesh collected his share of the flyers from the pile and left.

Do not write in
this column

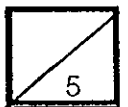
Not realising that Dinesh's share had been taken, Eric took $\frac{1}{3}$ of it and left.

Finally, Farid came and took $\frac{1}{3}$ of the remainder and left. In the end, there were 128 flyers left. How many flyers were there in the box at first?

Ans: _____ [5]

End of Paper 2

~ Please check your work thoroughly. ~





Answer Ke

EXAM PAPER 2012

SCHOOL : SCGS

SUBJECT : PRIMARY 5 MATHEMATICS

TERM : SA2

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

16)65 17)\$800 18)\$1400 19)120cm² 20)160 apples

21)1/3m 22)14 23)2:5 24)22 25)12cm

26)2 spaces→300m

1 space→300m÷2 = 150m

8 - 1 = 7

7 spaces→150m x 7 = 1050m

27)Sweets : Chocolates

3 : 5

3 : 3

5u - 3u = 2u

2u→6

1u→6÷2 = 3

3u + 5u = 8u

8u→3 x 8 = 24

29)16

30)Shaded part→9u - 5u = 4u

4u→20cm²

1u→20cm²÷4 = 5cm²

Original→9u

9u→5cm² x 9 = 45cm²

28)8 years old

Paper 2

1) $180^\circ - 125^\circ = 55^\circ$

$55^\circ + 90^\circ = 145^\circ$

$180^\circ - 145^\circ = 35^\circ$

$90^\circ - 35^\circ = 55^\circ$

$35^\circ + 45^\circ = 80^\circ$

$180^\circ - 80^\circ = 100^\circ$

$180^\circ - 90^\circ = 45^\circ$

$125^\circ - 45^\circ = 80^\circ$

2) $2.54 = 254\text{cm}$

Black $\rightarrow 254\text{cm}$

White $\rightarrow 254\text{cm} + 50\text{cm} = 304\text{cm}$

Total $\rightarrow 254\text{cm} + 304\text{cm} = 558\text{cm}$

$558\text{cm} = 5.58\text{m}$

3) $2842 \div 7 = 406$

$406 - 7 = 399$

$399 \div 7 = 57$

4) Box + 40 marbles $\rightarrow 4\text{kg}$

Box + 55 marbles $\rightarrow 5.08\text{kg}$

$55 - 40 = 15$

15 marbles $\rightarrow 5.08\text{kg} - 4\text{kg} = 1.08\text{kg}$

1 marble $\rightarrow 1.08\text{kg} \div 15 = 0.072\text{kg}$

$0.072\text{kg} = 72\text{g}$

5) $12\text{ files} - \$4.20 = 7\text{ files} + \8.80

$12\text{ files} - 7\text{ files} = 5\text{ files}$

$\$8.80 + \$4.20 = \$13$

5 files $\rightarrow \$13$

1 file $\rightarrow \$13 \div 5 = \2.60

6) $74 - 72 = 2$

$2u \rightarrow 180$

$1u \rightarrow 180 \div 2 = 90$

$90 - 72 = 18$

Now, there are 18 pupils

$18 - 2 = 16$

At first, there were 16 pupils.

7) 50C } \$15.80
 20C

$$5 \times \$0.50 = \$2.50$$

$$\$15.80 - \$2.50 = \$13.30$$

$$1 \text{ set} \rightarrow \$0.50 + \$0.20 = \$0.70$$

$$\$13.30 \div \$0.70 = 19$$

There are 19 sets of \$0.70 so, there are 19 \$0.20

$$\$0.50 \rightarrow 19 + 5 = 24$$

8) All horses $\rightarrow 60 \times 4 = 240$

Extra $\rightarrow 240 - 168 = 72$

$$72 \div 2 = 36$$

$$60 - 36 = 24$$

9) $7/7 - 5/7 = 2/7$

$$2/7 \div 2 = 1/7$$

$$1/7 \rightarrow 16 \text{ pears}$$

$$1/7 \rightarrow 16 \div 4 = \text{pineapples}$$

$$5/7 \rightarrow 4 \times 5 = 20 \text{ pineapples}$$

10) 3u $\rightarrow \$920 - \$380 = \$540$

$$1u \rightarrow \$540 \div 3 = \$180$$

$$\$180 \times 2 = \$360$$

11) 5u $\rightarrow 1185$

$$1u \rightarrow 1185 \div 5 = 237$$

$$10u \rightarrow 237 \times 10 = 2370$$

12) a) Ivan $\rightarrow \$50$

Diane $\rightarrow \$175$

Alex $\rightarrow \$100$

Eric $\rightarrow \$125$

May $\rightarrow \$225$

Jo $\rightarrow \$150$

$$\text{Total} \rightarrow \$50 + \$175 + \$100 + \$125 + \$225 + \$150 = \$825$$

b) Target $\rightarrow \$1000$

Raised $\rightarrow \$825$

$$\text{Diff} \rightarrow \$1000 - \$825 = \$175$$

$$175/1000 \times 100 = 17.5\%$$

$$\begin{aligned}
 13) 180^\circ - 63^\circ &= 117^\circ \\
 136^\circ + 117^\circ &= 253^\circ \\
 \angle q \rightarrow 360^\circ - 253^\circ &= 107^\circ \\
 180^\circ - 136^\circ &= 44^\circ \\
 90^\circ + 44^\circ &= 134^\circ \\
 180^\circ - 134^\circ &= 46^\circ \\
 46^\circ + 90^\circ &= 136^\circ \\
 180^\circ - 136^\circ &= 44^\circ
 \end{aligned}$$

$$14) 56$$

$$15) 16.637$$

$$16) \text{Area of fig} \rightarrow 16 \times 16 = 256$$

$$A \rightarrow \frac{1}{2} \times 8 \times 8 = 32$$

$$B \rightarrow \frac{1}{2} \times 8 \times 8 = 32$$

$$C \rightarrow \frac{1}{2} \times 8 \times 16 = 64$$

$$32 + 32 + 64 = 128$$

$$D \rightarrow 256 - 128 = 128 \text{ cm}^2$$

$$17) a) 20 - 12 = 8$$

$$28 - 20 = 8$$

$$b) 84$$

$$c) 148 - 4 = 144$$

$$144 \div 8 = 18$$

$$18) 2u \rightarrow 128$$

$$1u \rightarrow 128 \div 2 = 64$$

$$64 \times 3 = 192$$

$$2u \rightarrow 192$$

$$1u \rightarrow 192 \div 2 = 96$$

$$96 \times 3 = 288$$

$$288 \div 2 = 144$$

$$144 \times 3 = 432$$