



CATHOLIC HIGH SCHOOL
END-OF-YEAR EXAMINATION 2014
MATHEMATICS
PRIMARY 5
PAPER 1
(BOOKLET A)

Name : _____ ()

Class: Primary 5 _____

Date: 31 October 2014

Total Time for Booklets A and B: 50 min

15 questions

20 marks

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.

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. All diagrams are not drawn to scale. (20 marks)

1. The number of people who attended a performance was 6000 when rounded off to the nearest hundred.
Which one of the following could the actual number of people be?

- (1) 5928
 - (2) 5969
 - (3) 6051
 - (4) 6978
-

2. Which one of the following is the same as 5 km 30 m?

- (1) 503 m
 - (2) 530 m
 - (3) 5030 m
 - (4) 5300 m
-

3. Which one of the following is closest to 1?

- (1) $\frac{1}{3}$
 - (2) $\frac{2}{5}$
 - (3) $1\frac{1}{3}$
 - (4) $1\frac{2}{5}$
-

(Go on to the next page)

4. Which of the following has the same value as $\frac{2}{3} + 4$?

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

(2) $\frac{2}{3} \times 4$

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

(4) $\frac{3}{2} \times 4$

5. A box contains some red and blue beads. There are $\frac{3}{5}$ as many red beads as blue beads in the box. What is the ratio of the number of blue beads to the total number of beads in the box?

(1) 3 : 5

(2) 3 : 8

(3) 5 : 3

(4) 5 : 8

6. Find the value of $(8.4 \times 10) - 20 + 24 + 6$.

(1) 48

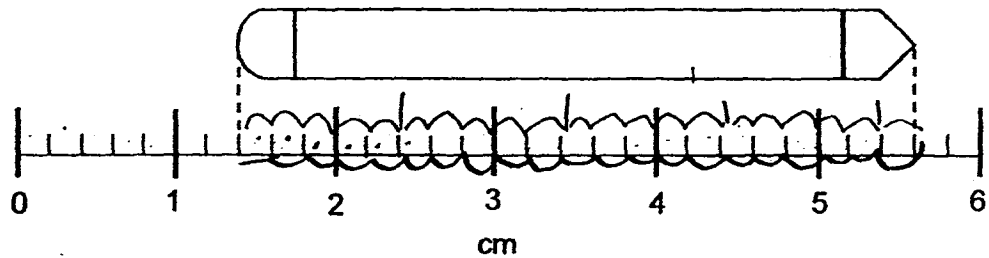
(2) 60

(3) 68

(4) 82

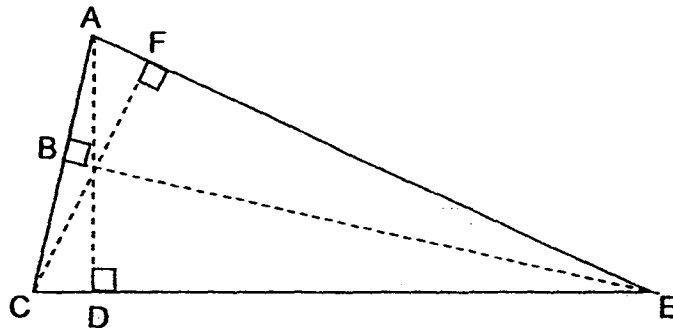
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7. Based on the diagram below, what is the length of the pencil?



- (1) 1.4 cm
- (2) 4.2 cm
- (3) 5.3 cm
- (4) 5.6 cm

8. Identify the base of triangle ACE, given that BE is the height.

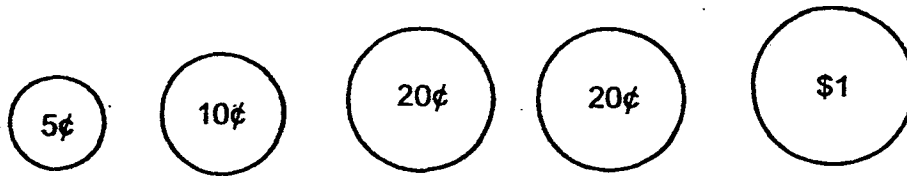


- (1) AE
- (2) AC
- (3) CE
- (4) CF

9. Find the sum of 50 hundredths and 4 thousandths.

- (1) 0.9
- (2) 0.09
- (3) 0.054
- (4) 0.504

10. James had the following coins in his wallet.



He paid for a bowl of noodles with four of the above coins.
The price of the bowl of noodles was the total value of the four coins.
Which one of the following could not be the price of the bowl of noodles?

- (1) \$1.25
- (2) \$1.35
- (3) \$1.45
- (4) \$1.50

-
11. Express 10¢ as a percentage of \$2.

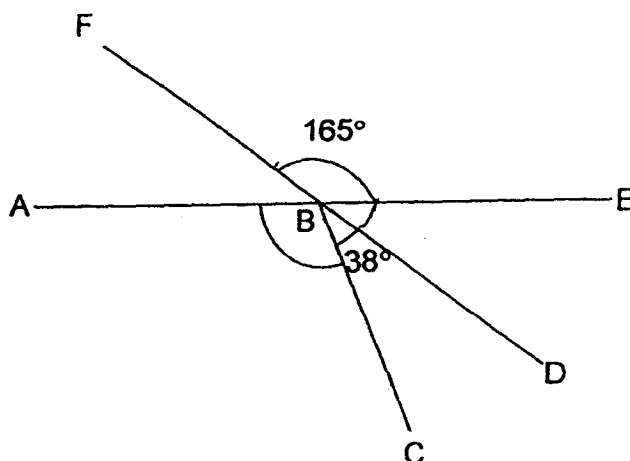
- (1) 0.05%
- (2) 0.2%
- (3) 5%
- (4) 20%

-
12. Orange syrup is prepared by mixing water and orange concentrate in the ratio 3 : 2. How much water would be needed to prepare 1200 ml of orange syrup?

- (1) 480 ml
- (2) 720 ml
- (3) 1800 ml
- (4) 3600 ml

(Go on to the next page)

13. In the figure, ABE and FBD are straight lines. Find $\angle ABC$.



- (1) 127°
 - (2) 142°
 - (3) 157°
 - (4) 195°
-
14. Mrs Chan bought 180 marbles. She gave 35% of the marbles to her son and the rest to her daughter. How many marbles did her daughter receive?
- (1) 63
 - (2) 65
 - (3) 117
 - (4) 145
-
15. Wendy had 420 m of ribbon. She used $\frac{3}{5}$ of the ribbon and cut the rest into 4 equal pieces. How long is each piece of ribbon?
- (1) 42 m
 - (2) 84 m
 - (3) 168 m
 - (4) 252 m



CATHOLIC HIGH SCHOOL
END-OF-YEAR EXAMINATION 2014
MATHEMATICS
PRIMARY 5
PAPER 1
(BOOKLET B)

Name : _____ ()

Class: Primary 5 _____

Date: 31 October 2014

Total Time for Booklets A and B: 50 min

15 questions

20 marks

Booklet A	
Booklet B	
Total	

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.

Booklet A and B consist of 12 printed pages.

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. Write the following in figures.

One million, eight hundred and twenty thousand, one hundred and sixty-eight

17. Express 80% as a fraction in the simplest form.

Ans: _____

18. Find the missing number in the box.

$$4 : 6 = \boxed{?} : 9$$

Ans: _____

(Go on to the next page)

19. The table shows the number of cards a group of children have.

Do not write
in this space.

Names	David	Bobby	Mary	Peter
Number of cards	46	20	0	18

Find the average number of cards each child has.

Ans: _____

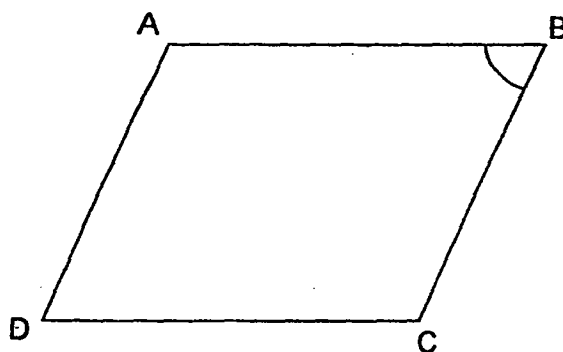
20. Express $5 \div 1000$ as a decimal.

Ans: _____

21. Find the value of 4.5×80 .

Ans: _____

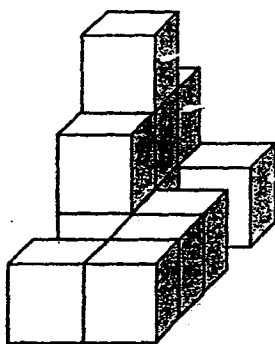
22. Figure ABCD is a parallelogram.
Mark the angle in the figure that has the same value as $\angle ABC$.



Do not write
in this space.



23. A solid is formed by stacking 1-cm unit cubes as shown below.
What is the volume of the solid?

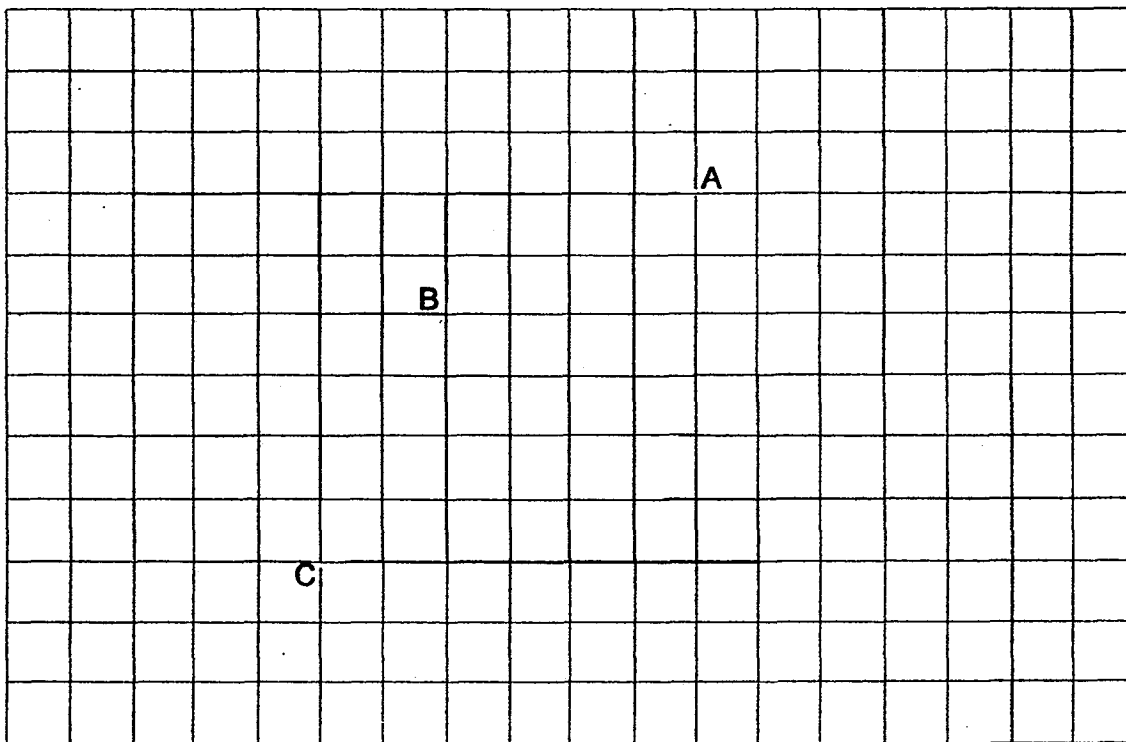


Ans: _____ cm^3



24. AB and BC are two sides of a rhombus. Complete the rhombus by drawing the other two sides in the square grid below.

Do not write
in this space.



25. Express 5.16 as a mixed number in the simplest form.

Ans: _____

Total marks for questions 16 to 25

(Go on to the next page)

Questions 26 to 30 carry 2 marks each. Show your working and 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

26. Find the value of $4 \div 7$.
Express your answer as a decimal correct to 1 decimal place.

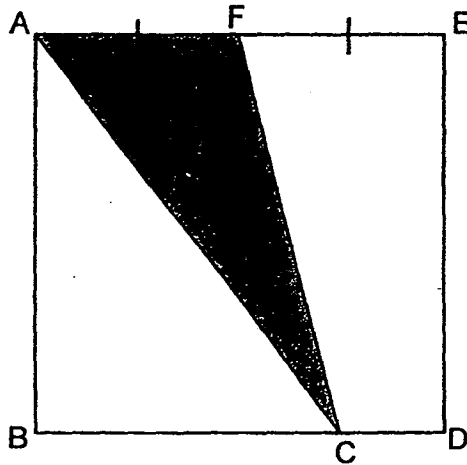
Ans: _____

27. At a carnival, $\frac{1}{4}$ of the people are men and $\frac{5}{9}$ of the people are women.
The rest are children. What fraction of the people are children?

Ans: _____

(Go on to the next page)

28. The figure below is made up of a square ABDE and triangle ACF. F is at the midpoint of AE. C is a point on BD. The area of square ABDE is 48 cm^2 . Find the area of triangle ACF.



Ans: _____ cm^2

29. The number of sweets Serena has is $\frac{2}{3}$ the number of sweets that Venus has. After Venus gives Serena 45 sweets, both of them have the same number of sweets. How many sweets do the two girls have altogether?

Ans: _____

Do not write
in this space.

30. Alex, Ben and Cody shared some stickers in the ratio 3 : 4 : 5 at first. After Alex gave away half of his stickers, find the ratio of the number of stickers Alex had to the number of stickers Ben had to the number of stickers Cody had at the end.

Do not write
in this space

Ans: _____

Total marks for questions 26 to 30

END OF BOOKLET B
END OF PAPER 1



CATHOLIC HIGH SCHOOL
END-OF-YEAR EXAMINATION 2014
MATHEMATICS
PRIMARY 5
PAPER 2

Name : _____ ()

Class: Primary 5 _____

Date: 31 October 2014

Total Time: 1 h 40 min

Parent's Signature: _____

Paper 1 Booklet A	20
Paper 1 Booklet B	20
Paper 2	60
Total Marks	100

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.

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. All diagrams are not drawn to scale. (10 marks)

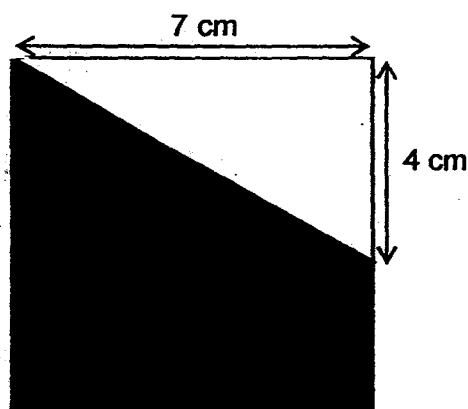
Do not write
in this space.

1. $\frac{2}{5}$ of Joe's savings is equal to $\frac{1}{4}$ of Charlie's savings.
Express Charlie's savings as a fraction of the total savings of the two boys.

Ans: _____



2. The figure below shows an unshaded triangle in a square.
Find the area of the shaded part of the figure.

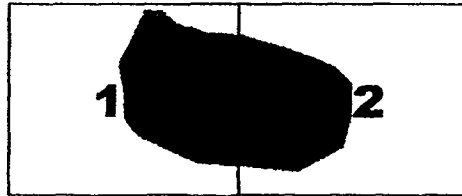


_____ cm²



(Go on to the next page)

3. Two 2-digit numbers were printed on a slip of paper. The average of the two numbers was 29. A digit of each number was covered by a coffee stain. What was the smaller of the two 2-digit numbers?

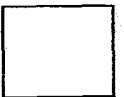


Ans: _____

4. Mrs Lim paid \$78.40 for 2 blouses and 2 skirts. Each skirt cost \$3.20 more than each blouse. How much did each blouse cost?

Ans: \$ _____

Do not write
in this space.



(Go on to the next page)

5. The mass of a bowl is twice the mass of a cup.
The total mass of 3 bowls and 2 cups is 1680 g.
Find the mass of 1 cup.
Express your answer in kilogram.

Do not write
in this space

Ans: _____ kg

(Go on to the next page)

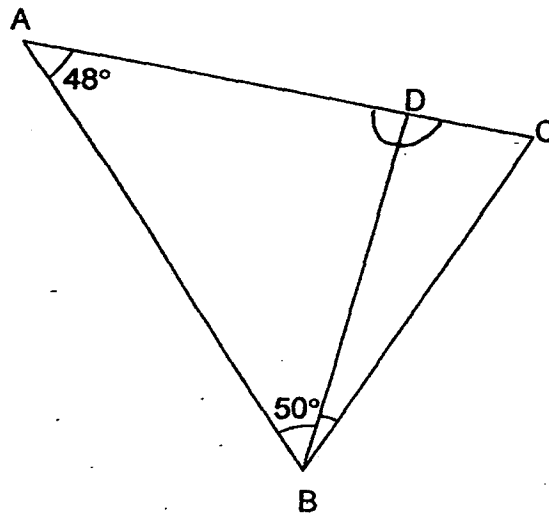
For questions 6 to 18, show your working and write your answers in the spaces provided. The number of marks available is shown in brackets [] at the end of each question or part-question.

All diagrams are not drawn to scale.

(50 marks)

Do not write
in this space.

6. ABC is an isosceles triangle. AB is equal to AC. D is a point on AC. Find $\angle DBC$.



Ans: _____ [3]

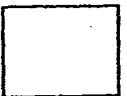


(Go on to the next page)

7. Jerry and Kelvin had an equal number of marbles at first. Jerry gave away 120 of his marbles and Kelvin bought another 148 marbles. In the end, Kelvin had 5 times as many marbles as Jerry. Find the number of marbles Jerry had at first.

Do not write
in this space.

Ans: _____ [3]



(Go on to the next page)

8. The usual price of a basketball was \$95. Jonathan bought the basketball at a discount of 20%. In addition, he had to pay 7% GST on the discounted price. How much did he pay for the basketball?

Do not write
in this space.

Ans: _____ [3]

(Go on to the next page)

9. Mrs Chew had 2 wooden poles, measuring 35 m and 56 m.
She cut the poles into smaller pieces of equal length with no remainder.

Do not write
in this space.

- (a) What is the largest possible length of each piece?
(b) How many smaller pieces of wooden poles would she get?

Ans: (a) _____ [2]

(b) _____ [1]

(Go on to the next page)

10. A plastic file costs \$2.20 and a marker costs \$1.20. Carol spent \$20 on some plastic files and markers. $\frac{1}{5}$ of the items she bought were markers. How many markers did she buy?

Do not write
in this space.

Ans: _____ [3]

(Go on to the next page)

11. 45 children had to make some flowers for fund raising. 3 of them went home and the rest of the children had to make 5 more flowers each. How many flowers were needed for fund raising?

Do not write
in this space.

Ans: _____ [4]

(Go on to the next page)

12. James and Sam had the same amount of money at first. James spent all his money buying a notebook and 5 identical pens. Sam bought a notebook and a stapler. The stapler cost \$4 more than a pen. Sam had \$16 left after buying the notebook and stapler.

Do not write
in this space.

- (a) What was the cost of 1 pen?
- (b) How much money would Sam have left if he had bought only a notebook?

Ans: (a) _____ [3]

(b) _____ [1]

(Go on to the next page)

13. The following table shows the wages for working on a project.

Day	Wages
Mondays to Friday	\$4 per hour
Saturdays and Sundays	\$30 per day
Public holidays	Extra \$10 per day

Zachary worked every day for a week from Monday to Sunday.
He worked 6 hours per day.

- (a) How many hours did he work in the week?
- (b) How much was he paid for the week if one of the days was a public holiday?

Ans: (a) _____ [1]

(b) _____ [3]

Do not write
in this space



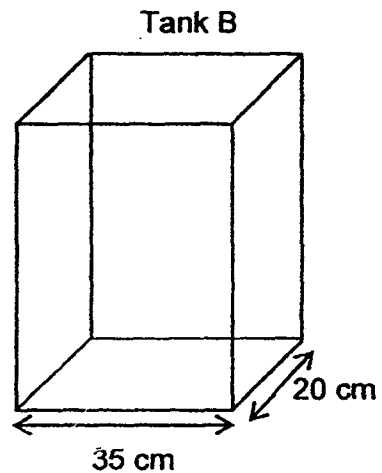
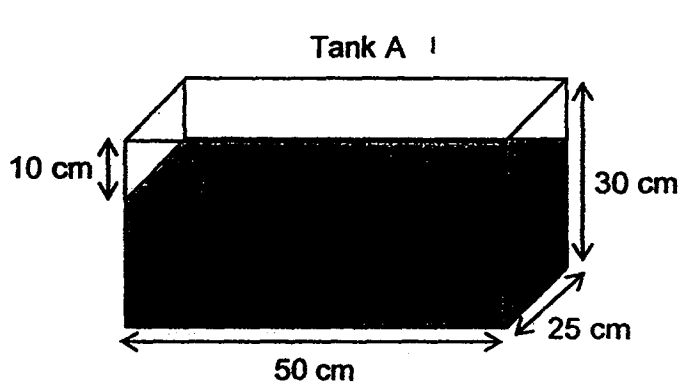
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14. Tank A and B are rectangular tanks. Tank A is partially filled with water to a height of 10 cm from the top. The water is then poured into Tank B which is empty.

Do not write
in this space.

(a) Find the volume of water in Tank A at first.

(b) Find the height of the water level in Tank B after water from Tank A is poured in. Round off the answer to the nearest whole number.



Ans: (a) _____ [2]

(b) _____ [2]



(Go on to the next page)

15. Amy, Belle and Cindy baked some muffins together.
Amy and Belle baked 275 muffins together. Belle and Cindy baked 122
muffins together. Amy and Cindy baked 235 muffins together.
How many muffins did Belle bake?

Do not write
in this space.

Ans: _____ [4]



(Go on to the next page)

16. There were some boys and girls at a party. Each boy was given 2 balloons and each girl was given 3 balloons. There were thrice as many girls as boys. In total, the girls received 154 more balloons than the boys.

Do not write
in this space.

- (a) How many children were there at the party?
(b) What is the total number of balloons given out to the children?

Ans: (a) _____ [3]

(b) _____ [2]

(Go on to the next page)

17. Samuel had some carnival tickets to sell. He sold $\frac{5}{9}$ of them on Monday and $\frac{1}{8}$ of the remainder on Tuesday. He sold the remaining 98 tickets on Wednesday. Each ticket was sold at \$5 each.

(a) How many tickets were sold on Tuesday?

(b) How much did Samuel collect from the sale of all the tickets?

Do not write
in this space.

Ans: (a) _____ [2]

(b) _____ [3]

(Go on to the next page)

18. Caleb and Dan had some coins. Caleb had only 50 cent coins and Dan had only 20 cent coins. At first, the number of coins Caleb had was $\frac{1}{3}$ the number of coins that Dan had. After Dan gave Caleb \$8, Dan had $\frac{2}{3}$ of his original number of coins left. What was the difference in the amount of money that Caleb and Dan had in the end?

Do not write
in this space.

Ans: _____ [5]

1

END OF PAPER.
PLEASE CHECK YOUR WORK CAREFULLY.

EXAM PAPERS 2014

SCHOOL: CATHOLIC HIGH SCHOOL
SUBJECT: MATHEMATICS
LEVEL: PRIMARY 5
TERM: SA 2

PAPER 1 BOOKLET A

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

BOOKLET B

Q16 1820168

Q17 $\frac{4}{5}$

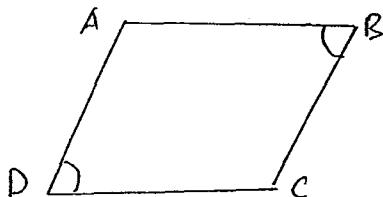
Q18 6

Q19 21

Q20 0.005

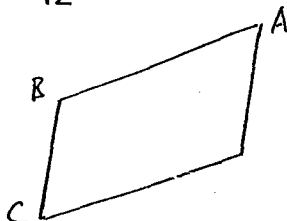
Q21 360

Q22



Q23 12

Q24



Q25 $5\frac{4}{25}$

Q26 0.6

Q27 $\frac{7}{36}$

Q28 12

Q29 450

Q30 3:8:10

PAPER 2

Q1 $\frac{2}{5} = \frac{4}{10} = \frac{8}{20}$

$\frac{1}{4} = \frac{5}{20}$

$8+5=13$

$C=8$

$\frac{8}{13}$

Q2 $\frac{1}{2} \times 7 \times 4 = 14\text{cm}^2$

$$7 \times 7 = 49 \text{ cm}^2$$

$$49 - 14 = 35 \text{ cm}^2$$

The area of the shaded part is 35 cm^2 .

Q3 $29 \times 2 = 58$

$$58 - 10 = 48 \text{ X}$$

$$58 - 11 = 47 \text{ X}$$

$$58 - 13 = 45 \text{ X}$$

$$58 - 16 = 42 \checkmark$$

The smaller of the two 2-digit numbers is 16.

Q4 $4B = \$78.40 - (\$3.20 \times 2) = \$72$

$$1B = \$72 \div 4 = \$18$$

Each blouse costed \$18.

Q5 $3 \times 2 = 6$

$$6 + 2 = 8$$

$$8 \text{ cup} = 1680 \text{ g}$$

$$1 \text{ cup} = 210 \text{ g} = 0.210 \text{ kg} = 0.21 \text{ kg}$$

1 cup's mass is 0.21 kg.

Q6 $180^\circ - 48^\circ = 132^\circ$

$$132^\circ \div 2 = 66^\circ$$

$$\angle DBC = 66^\circ - 50^\circ = 16^\circ$$

$\angle DBC$ is 66°

Q7 $4u = 120 + 148 = 268$

$$1u = 268 \div 4 = 67$$

$$J \text{ at first} = 67 + 120 = 187$$

Jerry had 187 marbles at first.

Q8 $100\% \text{ U.P.} = \$95$

$$1\% \text{ U.P.} = \$95 \div 100 = \$0.95$$

$$80\% \text{ U.P.} = \$0.95 \times 80 = \$76$$

$$100\% \text{ U.P.} = \$76$$

$$1\% \text{ U.P.} = \$0.76$$

$$7\% \text{ U.P.} = \$5.32$$

$$\$5.32 + \$76 = \$81.32$$

He paid \$81.32 for the basketball.

Q9 a) 1×35 1×56

$$5 \times 7$$
 2×28

$$4 \times 14$$

$$7 \times 8$$

The largest possible length of each piece is 7m.

b) $35 \div 7 = 5$

$$56 \div 7 = 8$$

$$5 + 8 = 13$$

She would get 13 smaller pieces of wooden poles.

Q10 $1 \times \$1.20 = \1.20

$$4 \times \$2.20 = \$8.80$$

$$1 \text{ grp} = \$1.20 + \$8.80 = \$10$$

$$\text{No of grps} = \$20 \div \$10 = 2$$

$$2 \times 1 = 2$$

She bought 2 markers.

- Q11 $45-3=42$
 $3\text{boys}=42 \times 5=210$
 $1\text{boy}=210 \div 3=70$
 $45\text{boys}=70 \times 45=3150$
 3150 flowers were needed for fund raising.
- Q12 a) $4p=\$16+\$4=\$20$
 $1P=\$20 \div 4=\5
 1 pen is \$5
 b) $\$5+\$20=\$25$
 He would be left with \$25.
- Q13 a) $7 \times 6=42\text{hours}$
 He worked 42 hours in the week.
 b) $\text{Mon}=\$4 \times 6=\24
 Mon to Fri=5 days
 $5 \times \$24=\120
 $\$30 \times 2=\60
 $\$120+\$60=\$180$
 $4180+\$10=\190
- Q14 a) $30\text{cm}-10\text{cm}=20\text{cm}$
 $\text{Vol}=50\text{cm} \times 25\text{cm} \times 20\text{cm}=25000\text{cm}^3$
 b) $25000\text{cm}^3 \div 35\text{cm} \div 20\text{cm}=35.71428571\text{cm} \approx 36\text{cm}$
 The height of the water level is 36cm.
- Q15 $A+B=275$
 $B+C=122$
 $A+C=235$
 $A \text{ more than } B=235-122=113$
 $2B=275-113=162$
 $1B=162 \div 2=81$
 Belle baked 81 muffins.
- Q16 a) $3 \times 3=9$
 $9-2=7$
 $154 \div 7=22$
 $22 \times 3=66$
 $66+22=88$
 There were 88 children at the party.
 b) $66 \times 3=198$
 $22 \times 2=44$
 $198+44=242$
 The total number of balloons was 242.
- Q17 $\begin{array}{c} \nearrow \text{Mon } 1/8 \nearrow T \\ T \searrow 1/9 \searrow R \nearrow 7/8 \searrow \text{Wed } (\$5 \text{ each}) \end{array}$
 a) $1/8R=98 \div 7=14$
 He sold 14 tickets on Tuesday.
 b) $R=14 \times 8=112$
 $4/9T=112$
 $1/9T=112 \div 4=28$
 $T=28 \times 9=252$

$$252 \times \$5 = \$1260$$

He collected \$1260 from the sale of all the tickets.

Q18

$$1u = 40$$

$$\text{Caleb at first} = 40 \times \$0.50 = \$20$$

$$\text{Dan at first} = 3 \times 40 \times \$0.20 = 24$$

$$\text{Caleb after} = \$20 + \$8 = \$28$$

$$\text{Dan after} = \$24 - \$8 = \$16$$

$$\text{Diff} = \$28 - \$16 = \$12$$

The difference was \$26.