Rosyth School
Semestral Two Examination 2010
Primary 5 Mathematics

Name: _____ Register No. _____

Class: Pr 5 - _____

Date: 27 October 2010 Parent's Signature: _____

Total Time for Booklets A and B : 50 min

PAPER 1
(Booklet A)

Instructions to Pupils:

1. Do not open this booklet until you are told to do so.
2. Follow all instructions carefully.
3. Shade your answers in the Optical Answer Sheet (OAS) provided.
4. You are **not** allowed to use a calculator
5. Answer all questions.

Section	Maximum Mark	Marks Obtained
Paper 1 (Booklet A)	20	

*** This booklet consists of 5 pages (excluding this cover page)**

Section 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 oval (1, 2, 3 or 4) on the Optical Answer Sheet. (20 marks)

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1. What does the digit 8 stand for in 258 634?

   (1) 800
   (2) 8 000
   (3) 80 000
   (4) 800 000

2. How many quarters are there in $2\frac{3}{4}$?

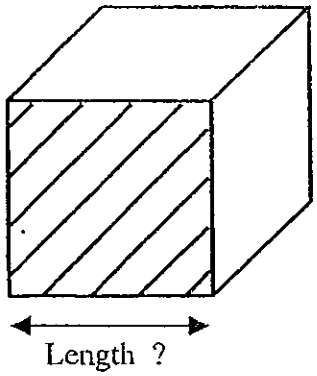
   (1) 6
   (2) 8
   (3) 11
   (4) 15

3. Which one of the following is equivalent to 18 : 24 ?

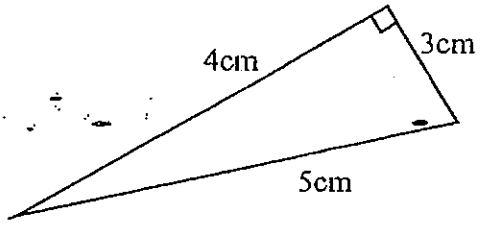
   (1) 1 : 2
   (2) 2 : 1
   (3) 3 : 4
   (4) 4 : 3

4. The area of the shaded face of the cube is 16 cm². What is the length of the cube?

(1) 12 cm
(2) 9 cm
(3) 8 cm
(4) 4 cm



5. What is the area of the figure (not drawn to scale) below?

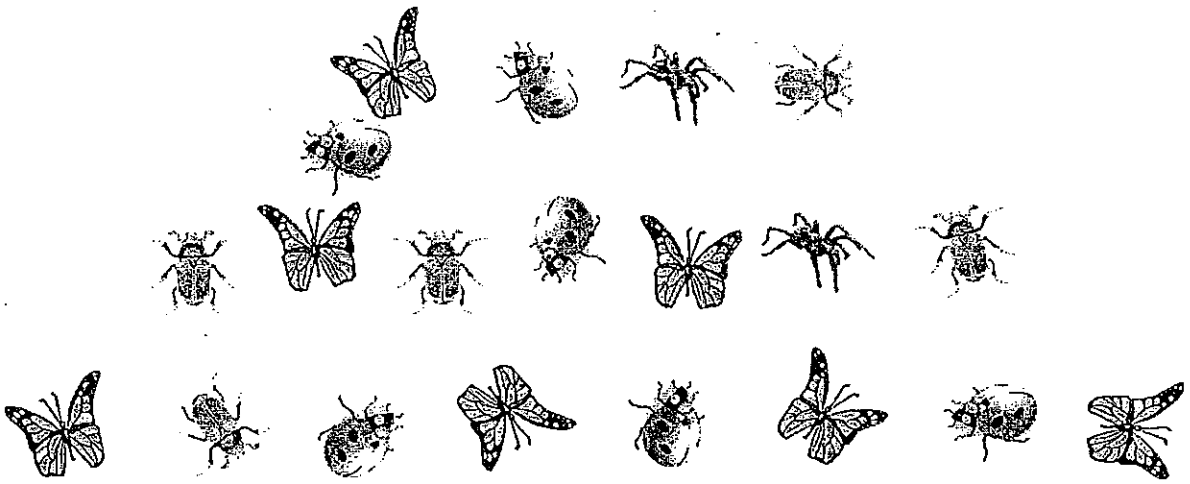


(1) 2.5 cm²
(2) 6 cm²
(3) 7.5 cm²
(4) 10 cm²

6. How many tenths make 2 whole?

(1) $\frac{1}{5}$
(2) $\frac{1}{10}$
(3) 10
(4) 20

7. What percentage of the insects are butterflies?

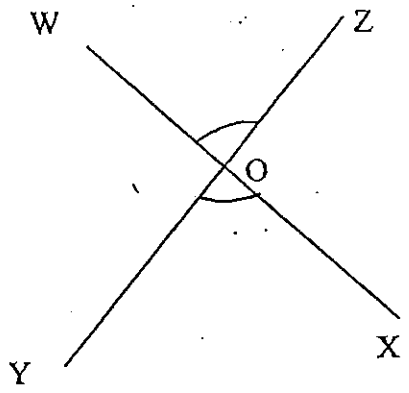


(1) 10%
(2) 25%
(3) 30%
(4) 35%

8. What is the average of 16 cm, 30 cm and 35 cm ?

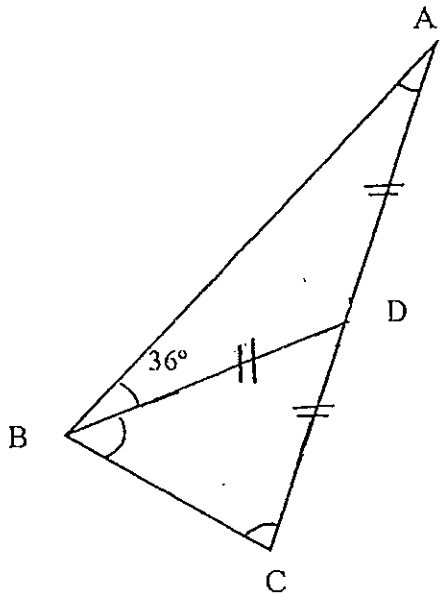
(1) 27 cm
(2) 30 cm
(3) 65 cm
(4) 81 cm

9. Lines WOX and YOZ are straight lines. Which angle has the same value as ∠WOZ?



(1) ∠ WOY
(2) ∠ WOX
(3) ∠ YOX
(4) ∠ XOZ

10. ABC is a triangle (not drawn to scale). AD = ~~BC~~ = BD. Find $\angle$ m.



~~(1)~~ 36°
~~(2)~~ 54°
~~(3)~~ 72°
~~(4)~~ 108°

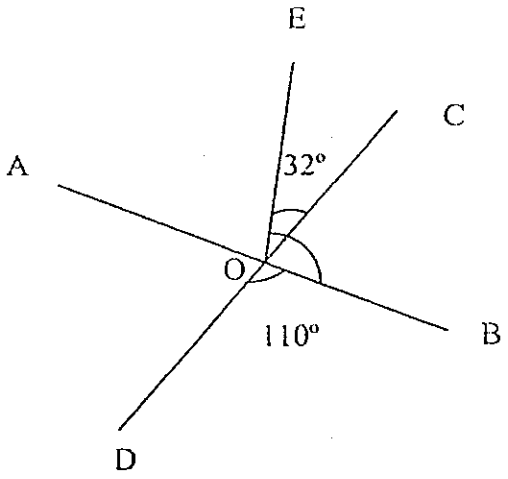
11. Judy and Lina had the same amount of money. After Lina bought a printer that cost $180, Judy had 3 times as much money as Lina. How much money did the girls have in the end?

~~(1)~~ $60
~~(2)~~ $90
~~(3)~~ $270
~~(4)~~ $360

12. Mr Tan earns $ 1200 a month. He spends $800 and saves the remainder. What fraction of his expenditure is his savings?

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

13. Lines AOB, DOC and OE are straight lines. Find $\angle$EOB.



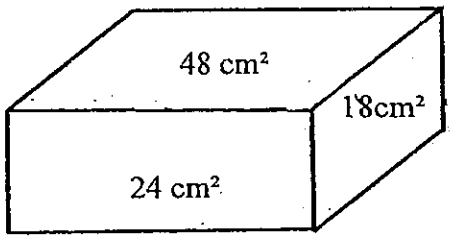
(1) 58°
(2) 70°
(3) 102°
(4) 122°

14. There are 3794 pupils in the school. $\frac{4}{7}$ of the pupils are Chinese and $\frac{1}{7}$ of them are Indian. The rest are Malays. How many Malay pupils are there in the school?

(1) 542
(2) 1 084
(3) 2 168
(4) 2 710

15. The figure below is a cuboid. The surface areas of the three faces are as shown in the diagram. What is the volume of the cuboid?

(1) 144 cm^3
(2) 168 cm^3
(3) 192 cm^3
(4) 336 cm^3



Rosyth School
Semestral Two Examination 2010
Primary 5 Mathematics

Name: _____ Register No. _____

Class: Pr 5 _____

Date: 27 October 2010 Parent's Signature: _____

Total Time for Booklets A and B : 50 min

PAPER 1
(Booklet B)

Instructions to Pupils:

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

Section	Maximum Mark	Marks Obtained
Paper 1 (Booklet B)	20	

*** This booklet consists of 6 pages (excluding this cover page)**

Section B

Questions **16** to **25** carry 1 mark each. Questions **26** 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. (10 marks)

16. What number is ten thousand less than one million?

Ans: _____

17. What is the digit in the thousandths place in 0.386?

Ans: _____

18. Find the value of $1 - \frac{1}{3} - \frac{5}{12}$ in its simplest form.

Ans: _____

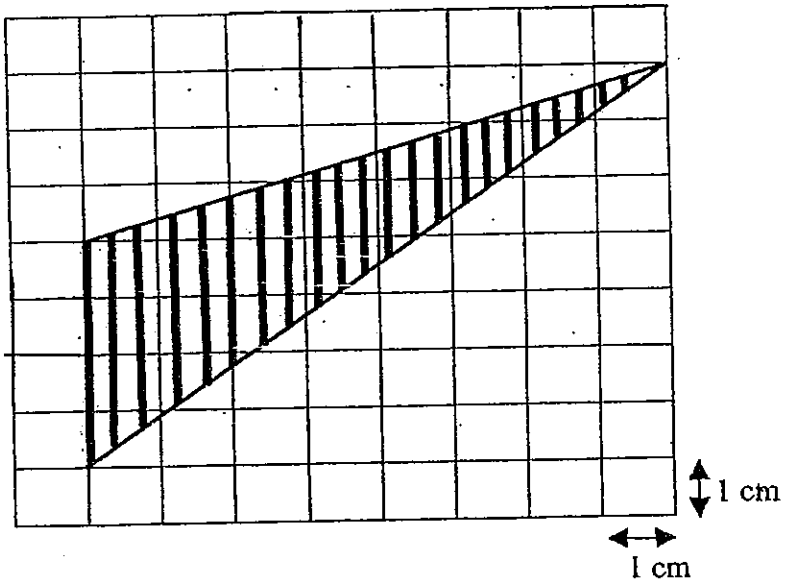
19. What is the value of $99 - 48 \div 3 + 500 + 7 \times 700$?

Ans: _____

20. Simplify the ratio 81 : 36 : 72.

Ans: _____

21. What is the area of the shaded figure (not drawn to scale) below?



Ans: _____ cm^2

22. The sides of a triangle are in the ratio 2 : 4 : 5. The longest side is 25 cm. What is the length of the shortest side?

Ans: _____ cm

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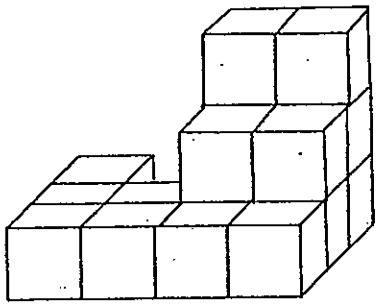
23. The solid is made up of 2-cm cubes. What is the volume of the solid?



Ans: _____ cm^3

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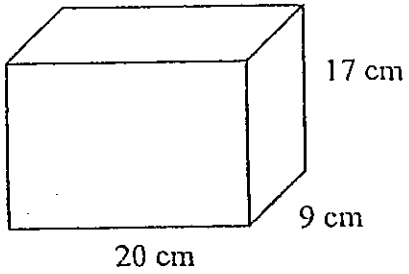
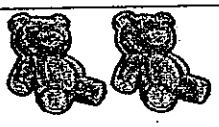
24. What is the maximum number of 4-cm cubes that can be cut from a cuboid measuring 20 cm by 17 cm by 9 cm?



Ans: _____

25. The picture graph shows the number of teddy bears owned by a group of 3 girls. How many more teddy bears must Farah buy for the group so that the average number of teddy bears owned by the group is 8?

Emma	
Farah	
Gaga	

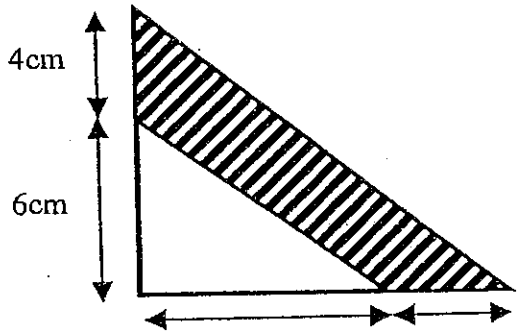
Ans: _____

Questions 26 to 30 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. (10 marks)

26. Asman had 260 marbles. He gave his brother 110 marbles and his cousin $\frac{1}{3}$ of the remainder. What fraction of his marbles was left? (Express your answer in its simplest form)

Ans: _____

27. Find the shaded area in the figure (not drawn to scale) below.



Ans: _____ cm^2

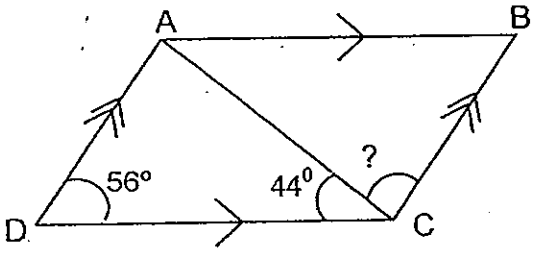
28. There were 60 questions in a test. Bala answered 75% of the questions correctly. How many questions did he answer incorrectly?

Ans: _____

29. The actual length of 2 ropes is measured up to 2 decimal places. The length of Rope A is rounded off to 2.6 m and the length of Rope B is rounded off to 3.4 m. What is the smallest possible difference in the actual lengths of these 2 ropes?

Ans: _____ m

30. The figure below is not drawn to scale. ABCD is a parallelogram. Find ∠ACB.



Ans: _____ °

End of Paper

Please check your work carefully.

Rosyth School
Semestral Two Examination 2010
Primary 5 Mathematics

Name: _____ Register No. _____

Class: Pr 5 - _____

Date: 27 October 2010 Parent's Signature: _____

Time: 1 h 40 min

PAPER 2

Instructions to Pupils:

1. Do not open this booklet until you are told to do so.
2. Follow all instructions carefully.
3. **Show your workings clearly** as marks are awarded for correct working.
4. Write your answers in this booklet.
5. You are allowed to use a calculator
6. Answer all questions.

Questions	Maximum Mark	Marks Obtained
Q 1 to 5	10	
Q 6 to 18	50	

Section	Maximum Mark	Marks Obtained
Paper 1	40	
Paper 2	60	
Total	100	

* **This booklet consists of 13 pages (including this cover page)**

Questions 1 to 5 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.

(10 marks)

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1) Complete the number pattern below.

203 468, 203 357, 203 246, ☐

Ans: _____

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2) At the school bookshop, the ratio of pens to rulers to erasers is 3 : 2 : 5. The total number of rulers and erasers is 4123. How many fewer pens are there than erasers?

Ans: _____

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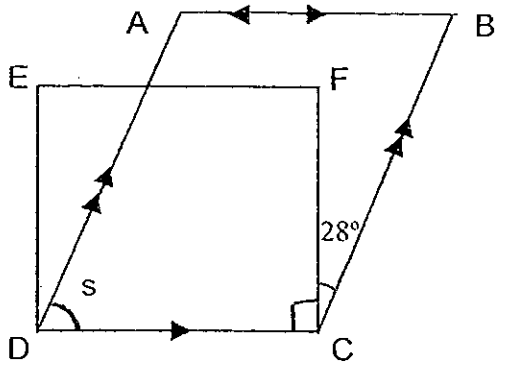
3) The table below shows the distance Kathy cycled in a week. What was the average distance she cycled in a day?

Day	Distance (km)
1	12
2	15
3	0
4	0
5	0
6	14
7	15

Ans: _____ **km**

4) In the figure (not drawn to scale), ABCD is a parallelogram and CDEF is a square. Find ∠ s.



0

Ans: _____

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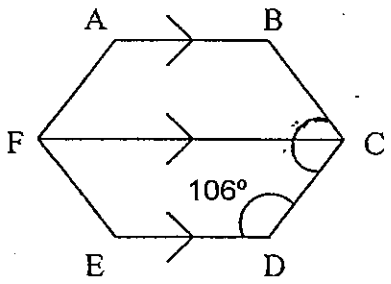
5) The figure below is not drawn to scale. FABC and FCDE are identical trapeziums. Find ∠BCD.



0

Ans: _____

For questions 6 to 18, **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. (50 marks)

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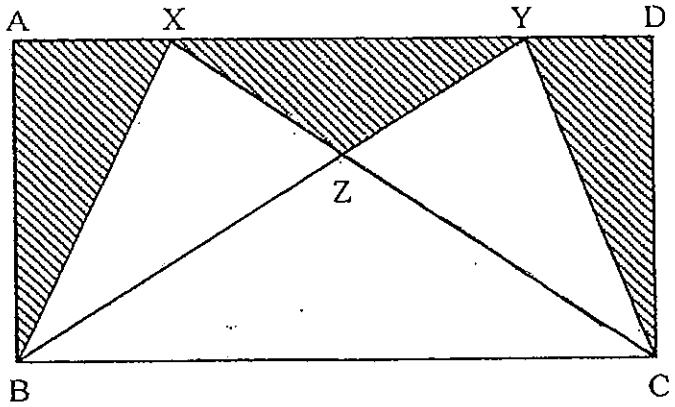
6) The figure below is not ~~dawn~~ drawn to scale. The figure is made up of triangles drawn within a rectangle. BY and CX are straight lines. The area of rectangle ABCD is 480 cm^2 and the area of triangle BXZ is 56 cm^2. Find the total area of the shaded parts.



Ans: _____ **[3]**

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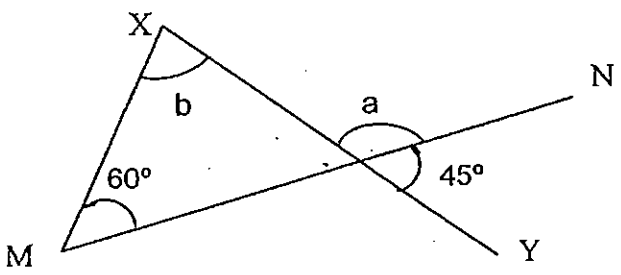
7) The figure below is not drawn to scale. XY and MN are straight lines.

a) Find ∠a

b) Find ∠b.



Ans: a)_____ **[1]**

b)_____ **[2]**

8) Cathy spent $\frac{1}{4}$ of her savings on food. She spent $\frac{1}{6}$ of the remainder on books. She was left with $224 in her savings. How much did she spend on food?

Ans: _____ **[3]**

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9) David earned $6 000 a month. He saved 20% of his salary. He spent $\frac{1}{4}$ of his savings on his sister and the rest of his savings on a birthday gift for his brother. How much did he spend on the gift?

Ans: _____ **[3]**

10) Greg spent $12.78 on some 26-cent and 32-cent stamps. He bought 9 more 26-cent stamps than 32-cent stamps. How many 32-cent stamps did Greg buy?

Ans: _____ **[3]**

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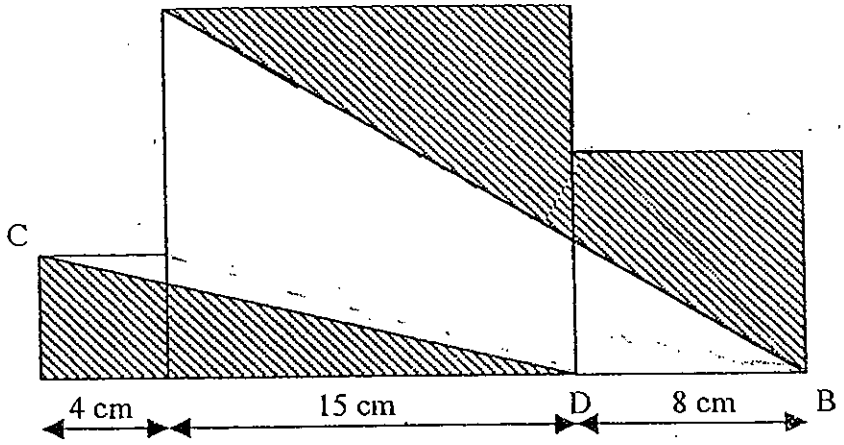
11) A container was $\frac{4}{5}$ filled with water. When 2050cm^3 of water was poured out, it became $\frac{2}{3}$ full. Find the capacity of the container in litres and millilitres.

Ans: _____ **[4]**

12) Grandma baked 384 cookies for friends last Christmas. The ratio of the number of chocolate chip cookies to the number of butter cookies baked was 9 : 15. This year, the ratio of the number of chocolate chip cookies to the number of butter cookies was 7 : 4. If the number of butter cookies she baked remained the same in both years, how many more chocolate chip cookies were there this year than last year?

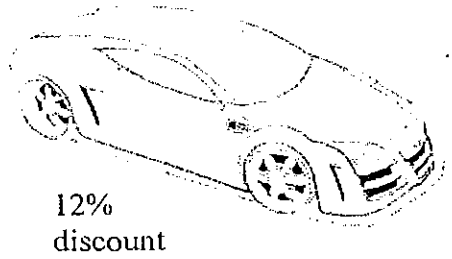
Ans: _____ **[4]**

13) The figure below is made up of 3 squares of side 4 cm, 15 cm and 8 cm. AB and CD are straight lines. Find the unshaded area.

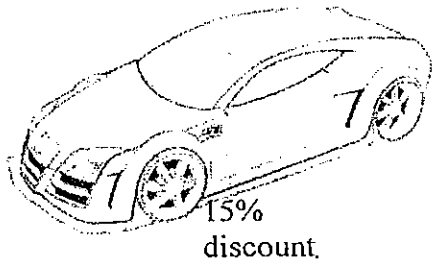


Ans: _____ **[4]**

14) A black car cost $100 500 before the 12% discount. A red car of the same model cost $105 000 before the 15% discount.



Black Car $100 500 (before discount)



Red Car $105 000 (before discount)

(a) Compare the prices of the black and red cars after discount. What is the difference in price?

(b) What is the 7% GST of the cheaper car after the discount?

Ans: (a)_____ **[3]**

(b)_____ **[2]**

15) Hanis had $960 less than Lina. After Hanis gave $2400 to Lina, Lina had 3 times as much as Hanis.

(a) How much did Lina have in the end?

(b) How much did Hanis have at first?

Ans: (a) _____ **[3]**

(b) _____ **[2]**

16) Chris bought 27 chicken pies and 14 beef pies for $115.20. A chicken pie cost $\frac{2}{3}$ as much as a beef pie. How much did 27 chicken pies cost?

Ans: _____ **[5]**

17) Mr Davidson has a class of less than 40 pupils. He gave all the pupils in his class some jellybeans. If he gave 5 jellybeans to each pupil, he would have 2 jellybeans left. If he gave 4 jellybeans to each pupil, he would have 38 jellybeans left.

a) How many jelly beans did he give away altogether?

b) How many pupils were there in his class?

Ans: (a) _____ **[2]**

(b) _____ **[2]**

18) The average height of 6 pupils was 170 cm. The average height of the first 4 pupils was 15 cm more than the average height of the remaining 2 pupils, Agnes and Tony.

a) Find the average height of the remaining 2 pupils, Agnes and Tony.

b) Agnes was 25 cm taller than Tony. Find Agnes' actual height.

Ans: (a) _____ **[3]**

(b) _____ **[2]**

~END OF PAPER~

Do check your work thoroughly!

Answer Ke

EXAM PAPER 2010

SCHOOL : ROSYTH PRIMARY
SUBJECT : PRIMARY 5 MATHEMATICS

TERM : SA2

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

16)990000 **17)6** **18) ¼** **19)5483** **20)9:4:8**

21)16cm2 **22)10** **23)136cm2** **24)40 cubes** **25)15 more teddy bears**

26)5/13 **27)32cm2** **28)15 questions** **29)0.71m** **30)80°**

Paper 2

1)203246 – 111 = 203135	**2)2u + 5u = 7u** **7u→4123** **1u→589** **5u – 3u = 2u** **2u→1178 fewer pens**
3)Total distance→12+15+14+15=56 **56 ÷ 7 = 8km**	**4)∠ S = 180° – 90° – 28° =62°**
5)∠FCD = 180° – 106° = 74° **∠ BCD = 74° x 2 = 148°**	**6)480 ÷ 2 = 240** **240 – 56 = 184** **480 – 184 – 56 – 56 = 184cm2**
7)a)∠a = 180° – 45° **= 135° (∠ on a straight line)** **b)∠b = 180° – 60° – 45°** **=75° (vertically opposite ∠)**	**8)5u→224** **1u→44.80** **2u→$89.60**
9)saved→20/100 x 6000 = 1200 **1 – ¼ = ¾ (gift)** **Gift→ ¾ x 1200 = $900** **David spent $900 on the gift.**	**10)$0.26 x 9 = $2.34** **$12.78 – $2.34 = $10.44** **$0.26 + $0.32 = $0.58** **$10.44 ÷ $0.58 = 18** **Greg bought 18 32-cent stamps**

11)<u>Before</u> Filled 4u x 3 = 12u Capacity 5u x 3 = 15u <u>After</u> Filled 2u x 5 = 10u Capacity 3u x 5 = 15u Diff→2u→2050 1u→1025 15u→15375 $15375cm^3$ = 15375ml = 15L 375ml	12)<u>Last year</u> cc 9u x 4 = 36 B 15u x 4 = 60u } 90u <u>This year</u> cc 7u x 15 = 105u B 4u x 15 = 60u Diff. in chocolate chip cookies →105u – 36u = 69u 69u→384 1u→4 69u→276 more
13)$15^2 + 8^2 + 4^2$ = 305 ½ x 19 x 4 = 38 ½ x 23 x 15 – (7x8) = 116.5 305 – 38 – 116.5 = 150.5cm^2	14)a)<u>Discount</u> Black→12/100 x 100500 = 12060 100500 – 12060 = 88440 Red→15/100 x 105000 = 15750 105000 – 15750 = 89250 89250 – 88440 = $810 The difference in price is $810 b)cheaper car→Black 7/100 x 88440 = 6190.80 The 7% GST is $6190.80
15)a)2u→960 1u→480 3u→1440 2400 x 3 = 7200 7200 + 1440 = $8640 Lina had $8640 in the end. b)2400 x 2 = 4800 48000 + 480 = $5280 Hanis had $5280 at first	16)27C + 14B = 115.20 (27 x 2/3) + 14B = 115.20 18B + 14B = 115.20 32B = 115.20 1B = 3.60 1C = 2/3 x 3.60 = 2.40 27C = $64.80 27 chicken pies cost $64.80
17)a)182 jellybeans b)36 pupils	18)a)15 x 4 = 60 1020 – 60 = 960 960 ÷ 6 = 160cm Their average height is 160cm b)160 x 2 = 320 320 – 25 = 295 295 ÷ 2 = 147.5 147.5 + 25 = 172.5cm Agnes' height is 172.5cm