

Anglo-Chinese School
(Junior)



SEMESTRAL ASSESSMENT 1 (2010)
PRIMARY 5

MATHEMATICS

PAPER 1
Booklet A

Wednesday

12 May 2010

50 min

INSTRUCTIONS TO PUPILS

DO NOT TURN OVER THE PAGES UNTIL YOU ARE TOLD TO DO SO

Follow all instructions carefully.

There are 15 questions in this booklet.

Answer ALL questions.

You are not allowed to use a calculator.

Name : _____ ()

Class : 5.()

Parent's Signature: _____

This question paper consists of 7 printed pages. (Inclusive of cover page)

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)

1 Which of the following is seven hundred and three thousand and fifty-six in figures?

- (1) 73 056
- (2) 703 056
- (3) 7 003 056
- (4) 7 030.056

2 In 89 602, what does the digit 9 stand for?

- (1) 9000 tens
- (2) 900 tens
- (3) 90 tens
- (4) 9 tens

3 Which of the following, when rounded off to the nearest hundred, is 40 000?

- (1) 39 559
- (2) 39 949
- (3) 40 049
- (4) 40 959

4 Express 30 seconds as a fraction of 2 minutes.

- (1) $\frac{1}{4}$
- (2) $\frac{1}{15}$
- (3) $\frac{3}{20}$
- (4) $\frac{2}{30}$

5 The total length of two rods is $2\frac{3}{4}$ m. If one rod is $1\frac{1}{2}$ m long, what is the length of the other rod?

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

(2) $\frac{3}{8}$ m

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

(4) $1\frac{3}{8}$ m

6 Find the value of $\frac{3}{5} \div 6$.

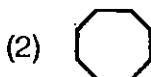
(1) $\frac{2}{5}$

(2) $\frac{18}{5}$

(3) $\frac{33}{5}$

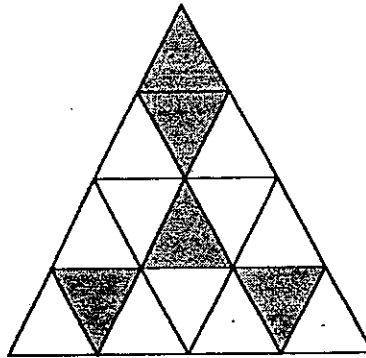
(4) $\frac{1}{10}$

7 Denni used buttons of ~~three~~ ^{four} different shapes to make a pattern. The first 12 buttons are shown below. What was the shape of the 38th button?



8 Find the ratio of the shaded parts to the unshaded parts.

- (1) 5 : 11
- (2) 5 : 16
- (3) 11 : 5
- (4) 11 : 16



9 A shopkeeper packed 1 kg of candy into three bags, X, Y and Z. If there were 200g of candy in Bag X and 300g in Bag Z, what is the ratio of the mass of candy in Bag X to the mass of candy in Bag Y to the mass of candy in Bag Z?

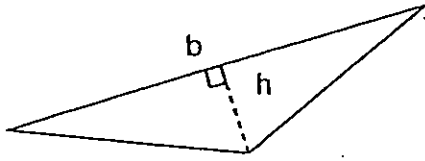
- (1) 2 : 3 : 5
- (2) 2 : 5 : 3
- (3) 5 : 2 : 3
- (4) 3 : 5 : 2

10 $26 \times 89 = 19 \times 89 + 89 + \square \times 89$

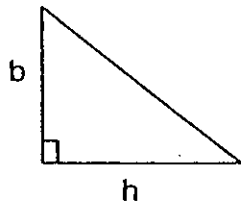
- (1) 1
- (2) 2
- (3) 5
- (4) 6

11 Which of the following triangles does **not** have its height, h , and base, b , correctly matched?

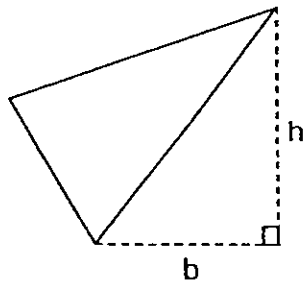
(1)



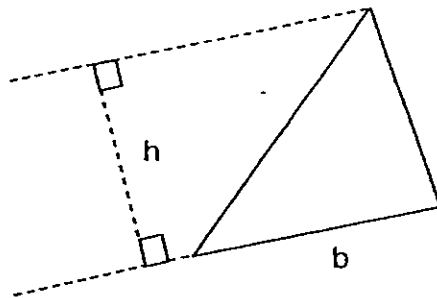
(2)



(3)



(4)

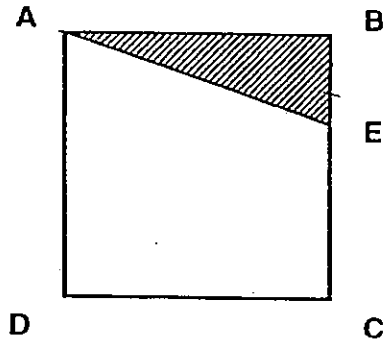


- 12 Amos wrote down the number of short messages he sent out from January to April. However, part of the paper was torn off. Which of the following is the best estimate for the missing number if Amos remembered the total was 1200 when rounded off to the nearest ten?

January	305
February	289
March	311
April	

- (1) 289
(2) 293
(3) 300
(4) 301
- 13 Paul spent $\frac{1}{3}$ of his money on a pair of jeans and $\frac{2}{9}$ of it on a shirt. What fraction of his money had he left?
- (1) $\frac{4}{9}$
(2) $\frac{5}{9}$
(3) $\frac{1}{4}$
(4) $\frac{3}{4}$
- 14 What is the missing number in $15 : 24 = \square : 40$?
- (1) 5
(2) 8
(3) 25
(4) 31

- 15 In the figure below, ABCD is a square of area 81 cm^2 . The length of AB is 3 times the length of BE. What is the area of triangle ABE?



- (1) 9.0 cm^2
- (2) 13.5 cm^2
- (3) 27.0 cm^2
- (4) 40.5 cm^2

End of Booklet A

Anglo-Chinese School
(Junior)



SEMESTRAL ASSESSMENT 1 (2010)
PRIMARY 5

MATHEMATICS

PAPER 2

Wednesday

12 May 2010

1 hr 40 min

INSTRUCTIONS TO PUPILS

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Follow all instructions carefully.

There are 18 questions in this booklet.

Answer ALL questions.

You are allowed to use a calculator.

Name : _____ ()

Class : 5.()

Parent's Signature: _____

Paper	Possible Marks	Marks Obtained
1	40	
2	60	
TOTAL	100	

This question paper consists of 17 printed pages. (Inclusive of cover page)

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 Use all the digits given to form the greatest 6-digit odd number.

3	6	8	5	0	4
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Ans: _____

17 A piece of plank 3m long is cut into 6 pieces of equal length. What is the length of each piece?

Ans: _____ cm

18 Express $3\frac{2}{3}$ as a decimal correct to 2 decimal places.

Ans: _____

19 The length of a rectangle is $\frac{7}{9}$ m. Its breadth is $\frac{2}{3}$ m shorter than the length. What is the perimeter of the rectangle?

Ans: _____ m

Sub-Total

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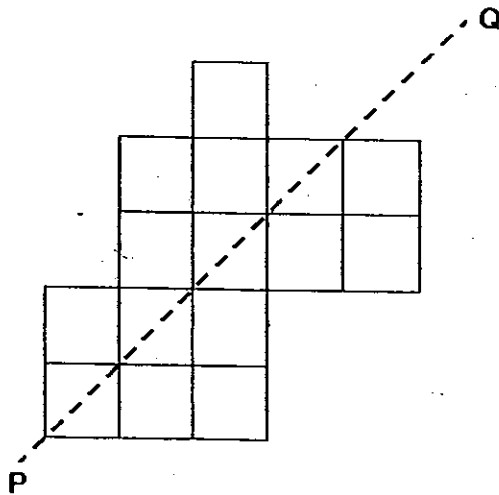
- 20 Mr Chong had $2\frac{1}{2}$ kg of charcoal. He used $\frac{8}{9}$ of it for a barbeque. How much charcoal did he use? (Give your answer in the simplest form.)

Ans: _____ kg

- 21 To make purple paint, Jevon uses 4 tubes of red paint for every 7 tubes of blue paint. If he uses 28 tubes of red paint, how many tubes of blue paint does he use?

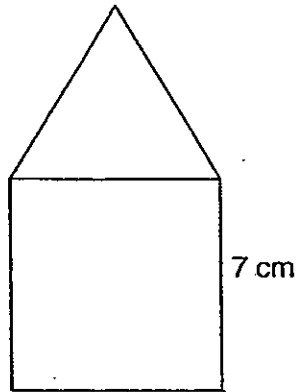
Ans: _____

- 22 The figure below shows 15 squares. What is the **smallest number** of squares that must be added so that the dotted line PQ is a line of symmetry?



Ans: _____

- 23 The figure below is made up of a square and an equilateral triangle. What is its perimeter?

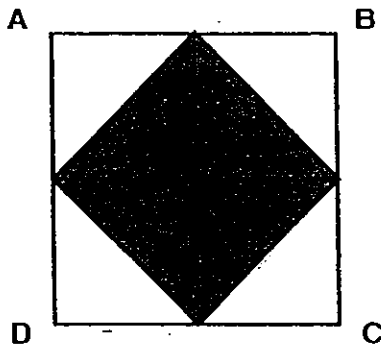


Ans: _____ cm

- 24 In a basket, the ratio of the number of apples to the number of pears is 2 : 3. The ratio of the number of apples to the number of oranges is 4 : 5. What is the ratio of the number of oranges to the total number of fruits? (Give your answer in the simplest form.)

Ans: _____

- 25 Square ABCD has an area of 36 cm^2 . It is divided into 8 equal parts, as shown in the figure. What is the shaded area?



Ans: _____ cm^2

Question 26 to 30 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. (10 marks)

26 A man is 3 times as old as his son now. 5 years ago, he was 64 years old. How old will his son be in 3 years' time?

Ans: _____

27 Samantha bought thrice as many pencils as rulers. Each pencil cost 30 ¢ and each ruler cost 50 ¢. She paid \$5.60 altogether. How many pencils did she buy?

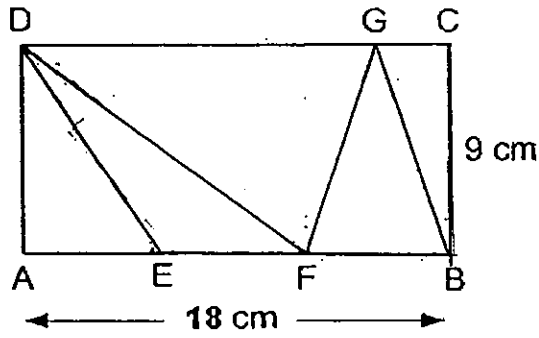
Ans: _____

28 $60 - \square \div 3 + 5 = 56$

What is the missing number in the box?

Ans: _____

- 29 In the figure, ABCD is a rectangle. If $AE = EF = FB$, what fraction of the figure is unshaded? (Give your answer in the simplest form.)



Ans: _____

Larry had 300 chicken wings. He sold $\frac{2}{3}$ of them in the morning and $\frac{1}{4}$ of the remainder in the afternoon. How many chicken wings did he sell altogether?

Ans: _____

End of Booklet B

Anglo-Chinese School
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SEMESTRAL ASSESSMENT 1 (2010)
PRIMARY 5

MATHEMATICS

PAPER 1
Booklet B

Wednesday

12 May 2010

50 min

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Name : _____ ()

Class : 5.()

Parent's Signature: _____

Booklet	Possible Marks	Marks Obtained
A	20	
B	20	
TOTAL	40	

This question paper consists of 6 printed pages. (Inclusive of cover page)

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. (10 marks)

1 $\frac{1}{8}$ of a number is 9. What is $\frac{3}{4}$ of the number?

Ans: _____

2 $\frac{1}{2}$ of Salleh's age is equal to $\frac{1}{5}$ of Tim's age. If their total age is 84 years, how old is Tim?

Ans: _____

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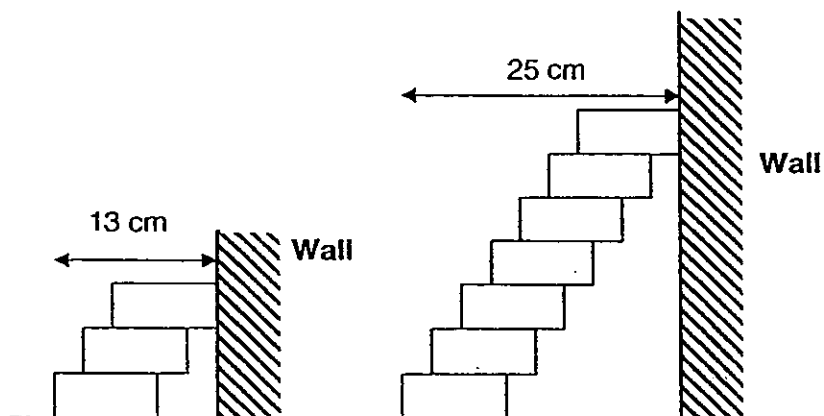
- 3 Mrs Rai has some stickers in a box. If she puts the stickers into bags of 6 or 9, she will have no stickers left over. If she puts them into bags of 7, she will have 2 stickers left over. What is the **smallest** possible number of stickers in the box?

Ans: _____

- 4 Adam and Melvin saved \$800 altogether. $\frac{1}{4}$ of Adam's savings was \$65 more than $\frac{1}{5}$ of Melvin's savings. How much money did Melvin save?

Ans: \$ _____

- 5 The figure below shows 2 stacks of identical wooden blocks. The blocks are stacked and glued one on top of another. Each block has the same length of overlap. The length of the first stack of 3 blocks is 13 cm. The length of the second stack of 7 blocks is 25 cm.



Find the length of a stack of 12 blocks arranged in the above manner.

Ans: _____ cm

For questions 6 to 18, show your working clearly 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)

6 The table below shows the special package costs for flight to Timbucktooth Island.

C

Package Price	
1 st and 2 nd persons	\$380 per person
3 rd and 4 th persons	\$260 per person
Child below age of 12	\$240 per child

Mr Eu went to Timbucktooth Island with his wife and three children aged 5, 7 and 14. How much did Mr Eu pay for the entire trip?

Ans: _____ [3]

- 7 The ratio of Quentin's age to Ronny's age is 5 : 4. In 12 years' time, the sum of their ages will be 78 years. What will be the ratio of Quentin's age to Ronny's age in 12 years' time? (Give your answer in the simplest form.)

Ans: _____ [3]

- 8 Kay, Leo and Manny shared \$600. Kay received thrice the amount that Leo received and Manny received \$40 more than Kay. What is the ratio of the amount of money received by Kay to the amount received by Leo to the amount received by Manny? (Give your answer in the simplest form.)

Ans: _____ [3]

Sub-Total

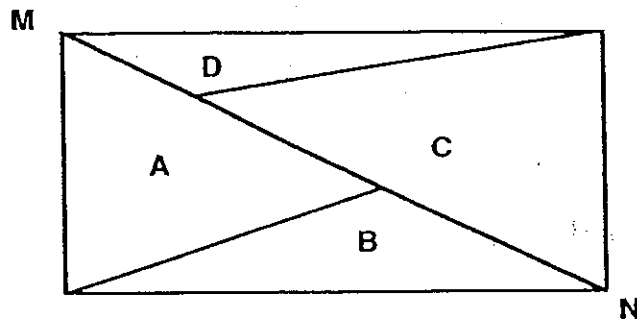
- 9 Alice baked some cakes. $\frac{2}{3}$ of them were chocolate cakes, $\frac{1}{4}$ of them were banana cakes and the rest were raisin cakes. There were 176 chocolate and banana cakes.
- a) What fraction of the cakes were raisin cakes?
b) How many cakes did she bake in all?

Ans: _____ [1]

Ans: _____ [2]

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- 10 The figure below shows a rectangle that is divided into 4 parts A, B, C and D.



The line MN divides the rectangle into 2 equal parts. The ratio of Area A to Area B is 3 : 2 and the ratio of Area B to Area C is 1 : 2. Area D is 102.2 cm^2 . What is the area of the rectangle?

Ans: _____ [3]

Sub-Total

- 11 Davin spent some money on 22 guppies. He spent the same amount of money on another 16 swordtails. Each swordtail cost 45¢ more than each guppy. How much did Davin spend altogether?

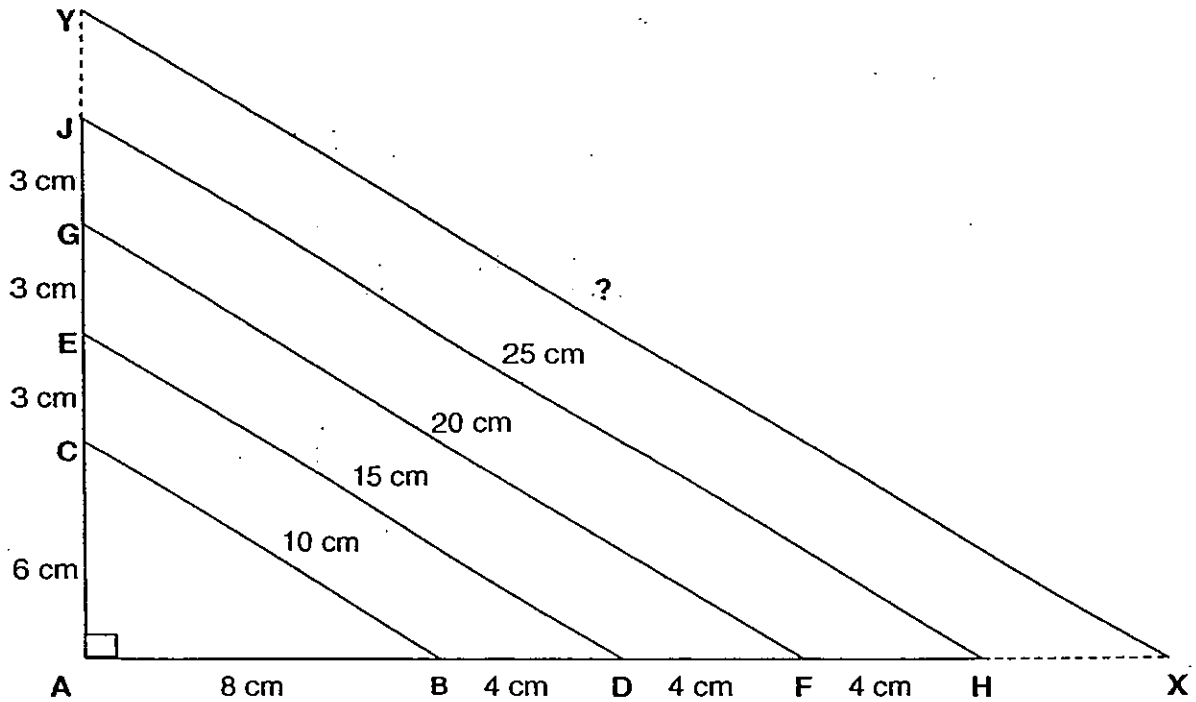
Ans: _____ [4]

- 12 A farmer rears chickens in 3 pens. The number of chickens in the first pen is $\frac{5}{8}$ of that in the second pen. The number of chickens in the third pen is $\frac{3}{5}$ that of the first pen. If there are a total of 2800 chickens, how many more chickens are there in the second pen than the third pen?

Ans: _____ [4]

13 In the diagram below, Δ_1 is ΔABC , Δ_2 is ΔADE , Δ_3 is ΔAFG , Δ_4 is ΔAHJ .
 $BC = 10\text{cm}$, $DE = 15\text{cm}$, $FG = 20\text{cm}$ and $HJ = 25\text{cm}$.

- (a) What is the area of ΔABC ?
- (b) What is the length of XY if ΔAXY is $\Delta 9$?
- (c) What is the area of ΔAXY ?



Ans: (a) _____ [1]

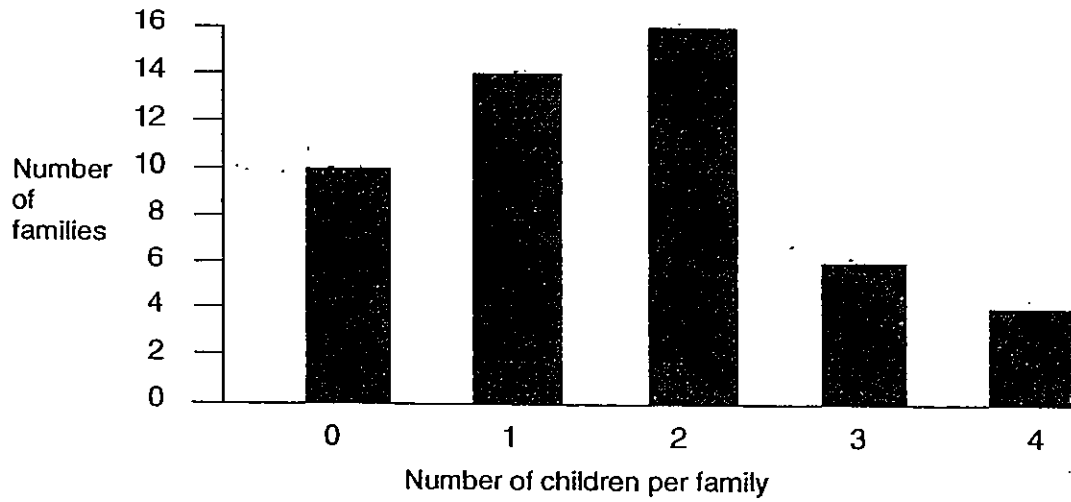
Ans: (b) _____ [1]

Ans: (c) _____ [2]

- 14 A delivery company delivered 1000 teapots for Mr Teo. It charged 60 ¢ for every teapot safely delivered, but it had to pay Mr Teo \$5.90 for every teapot broken during the delivery. In the end, Mr Teo only needed to pay a total of \$567.50 for the delivery. How many teapots were broken during the delivery?

Ans: _____ [4]

15 The bar graph shows the number of children per family in Orchid Estate.

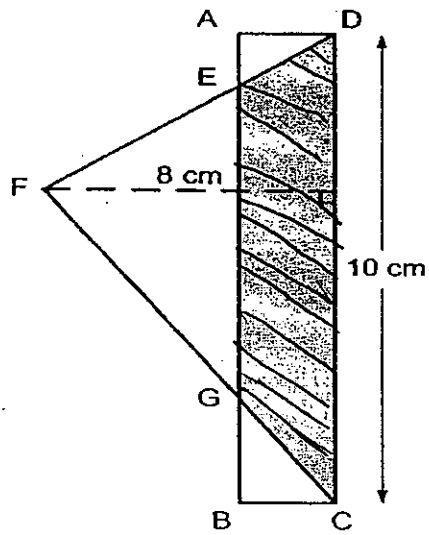


- (a) What is the total number of children in Orchid Estate?
(b) What fraction of the families in Orchid Estate has fewer than 3 children?

Ans: _____ [2]

Ans: _____ [2]

- 16 In the figure, ABCD is a rectangle, DC = 10 cm and the height of $\triangle DFC$ is 8 cm. The area of the shaded part EGCD is $\frac{5}{8}$ of the area of $\triangle DFC$. It is also $\frac{5}{7}$ of the area of rectangle ABCD. What is the length of AD?



Ans: _____ [5]

17 There were 80 animals in K-9 Pet Shop. $\frac{9}{20}$ of the animals were kittens and the rest were puppies. After some kittens were sold, $\frac{3}{25}$ of the animals left in the shop were kittens.

- (a) How many animals were left?
- (b) How many kittens were sold?

Ans: (a) _____ [4]

Ans: (b) _____ [1]

Sub-Total

18 In the beginning, $\frac{5}{9}$ of Benny's savings is the same as $\frac{2}{3}$ of Jessica's savings. Jessica withdrew $\frac{1}{3}$ of her savings and Benny added \$70 to his. Benny then has \$190 more than Jessica.

- (a) How much savings does Jessica have in the end?
- (b) If Benny withdraws half of his savings, what fraction of Benny's savings is Jessica's? (Give your answer in the simplest form.)

Ans: _____ [2]

Ans: _____ [3]

End of Paper 2

Sub-Total

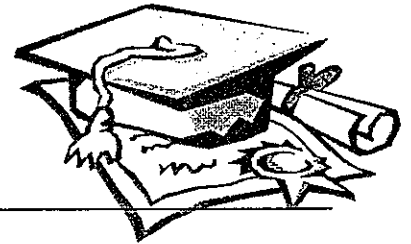
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ANSWER SHEET

EXAM PAPER 2010

SCHOOL : ACS (JUNIOR) PRIMARY
SUBJECT : PRIMARY 5 MATHEMATICS



TERM : SA1

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

- | | | | | |
|-----------------|---------------|---------|----------|------------------------|
| 16)865403 | 17)50cm | 18)3.67 | 19)17/9m | 20)22/9kg |
| 21)49 tubes | 22)3 squares | 23)35CM | 24)1:3 | 25)18.0cm ² |
| 26)26 years old | 27)12 pencils | 28)27 | 29)2/3 | 30)225 |

Paper 2

<p>1) $9 \times 8 = 72$ $72 \div 4 = 18$ $18 \times 3 = 54$ $\frac{3}{4}$ of the number is 54</p>	<p>2) $84 \div 7 = 12$ $12 \times 5 = 60$ Tim is 60 years old</p>
<p>3) 72 stickers</p>	<p>4) $800 - (65 \times 4) = 540$ $540 \div 9 = 60$ $60 \times 5 = 300$ Melvin save \$300</p>
<p>5) $7 - 3 = 4$ $25 - 13 = 12$ $12 \div 4 = 3$ $11 \times 3 = 33$ $33 + 7 = 40$ The length of 12 blocks is 40cm</p>	<p>6) $380 \times 2 = 760$ $760 + 260 + (240 \times 2) = \\1500 He paid \$1500 for the entire trip</p>
<p>7) $12 \div 2 = 6$ $42: 36 = 7:6$ $5 \times 6 = 30$ The ratio is 7:6 $4 \times 6 = 24$ $30 + 12 = 42$ $24 + 12 = 36$</p>	<p>8) $600 - 40 = 560$ <u>K : L : M</u> $560 \div 7 = 80$ 240:80:280 $80 \times 3 = 240$ 24 : 8 : 28 $240 + 40 = 280$ 12 : 4 : 14 6 : 2 : 7 The ratio is 6:2:7</p>

<p>9)a) $3/3 = 8/12$ $1/4 = 3/12$ $12/12 - 8/12 - 3/12 = 1/12$ 1/12 of the cakes were raisin cakes. b) $8 + 3 = 11$ $176 \div 11 = 16$ $16 \times 12 = 192$ She baked 192 cakes in all</p>	<p>10) 1022cm</p>
<p>11) \$52.80</p>	<p>12) $2800 \div 16 = 175$ $175 \times 8 = 1400$ $175 \times 3 = 525$ $1400 - 525 = 875$ There are 875 more chicken in the 2nd pen than the 3rd pen.</p>
<p>13)a) $1/2 \times 8 \times 6 = 24$ The area of $\triangle ABC$ is 24cm² b) $9 - 4 = 5$ $5 \times 5 = 25$ $25 + 25 = 50$ The length is 50cm c) $5 \times 3 = 15$ $6 + 15 + 9 = 30$ $5 \times 4 = 20$ $20 + 8 = 12 = 40$ $1/2 \times 40 \times 30 = 600$ The area is 600cm²</p>	<p>14) $1000 \times 60 = 600.00$ $600.00 - 567.50 = 32.50$ $32.50 \div 6.50 = 5$ teapots</p>
<p>15)a) $16 \times 2 = 32$ $6 \times 3 = 18$ $4 \times 4 = 16$ $32 + 18 + 16 = 66 = 80$ The total number of children in Orchid Estate is 80. b) $16 + 14 + 10 + 6 = 46 = 50$ $16 + 14 + 10 = 40$ $40/50 = 4/5$ 4/5 of the families in Orchid Estate has fewer than 3 children.</p>	<p>16) $1/2 \times 10 \times 8 = 40$ $40 \div 8 = 5$ $5 \times 5 = 25$ $25 \div 5 = 5$ $5 \times 7 = 35$ $35 \div 10 = 3.5$ AD is 3.5cm long</p>
<p>17)a) $25 - 3 = 22$ $44 \div 22 = 2$ $25 \times 2 = 50$ animals b) $80 - 50 = 30$ kittens</p>	<p>18)a) $190 - 70 = 120$ $120 \div 4 = 30$ $30 \times 5 = 150$ Jessica has \$150 savings in the end. b) $30 \times 9 = 270$ $270 + 70 = 340$ $340 \div 2 = 170$ $150/170 = 15/17$</p>