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**ANGLO CHINESE SCHOOL  
(PRIMARY)**

**END-OF-YEAR EXAMINATION 2005  
MATHEMATICS**

**Booklet A**

**Name:** \_\_\_\_\_ (    )

**Class:** Primary 5 \_\_\_\_\_

**Date:** 26 October 2005

**Duration of Booklet A & B:** 2 hr 15 mins

**THIS BOOKLET CONTAINS PAGE 1 to 6.  
DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.  
FOLLOW ALL INSTRUCTIONS CAREFULLY.**

**SECTION A - Multiple Choice Questions (20 MARKS)**

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 (OAS).

1. In 901 287, the value of the digit 9 is 9 x \_\_\_\_\_.

- 1) one thousand
- 2) one ten thousand
- 3) one hundred thousand
- 4) one million

2. Round off 89.44 to 1 decimal place.

- 1) 89.0
- 2) 89.4
- 3) 89.5
- 4) 90.0

3. What is the value of  $(84 \div 7) (4 \times 2)$ ?

- 1) 56
- 2) 16
- 3) 14
- 4) 4

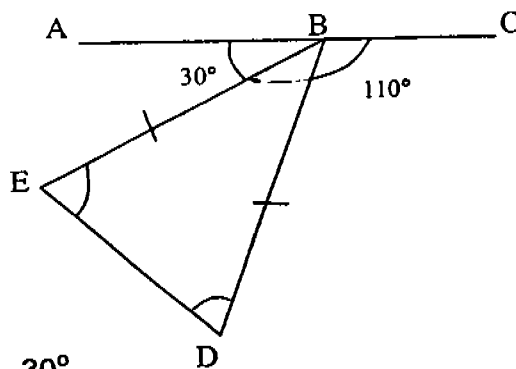
4.  $\frac{4}{5}$  of the pizza is eaten. What percentage of the pizza is left?

- 1) 20%
- 2) 40%
- 3) 60%
- 4) 80%

5. The average height of 4 girls was 156 cm. When Mary joined the group, the average height of the 5 girls became 158 cm. How tall was Mary?

- 1) 157 cm
- 2) 166 cm
- 3) 176 cm
- 4) 186 cm

6. In the diagram below, ABC is a straight line. BDE is an isosceles triangle. Find  $\angle BED$ .  
(The diagram is not drawn to scale).



- 1) 30°
- 2) 40°
- 3) 70°
- 4) 80°

7. An egg seller sold 40% of his eggs on Monday and  $\frac{1}{5}$  of the remainder on Tuesday. What percentage of his eggs did he sell on both days?

- 1) 60%
- 2) 52%
- 3) 12%
- 4) 8%

8. What is the number represented by  ?

$$\text{star} + \text{sun} + \text{star} = 28$$

$$\text{sun} + \text{sun} + \text{sun} = 30$$

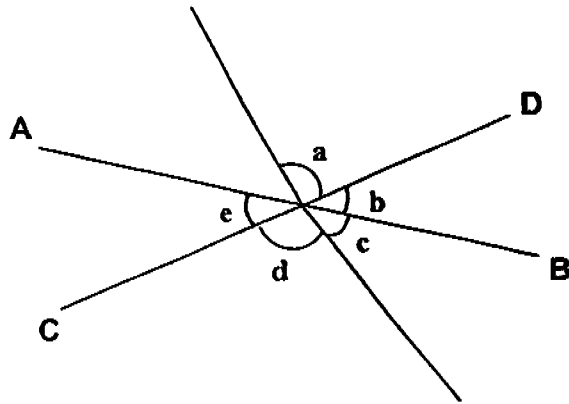
$$\text{heart} + \text{sun} + \text{star} = 30$$

- 1) 9
- 2) 10
- 3) 11
- 4) 18

9. What is the maximum number of 2-cm cubes that can be packed into a rectangular box of sides 14 cm by 9 cm by 8 cm?

- 1) 112
- 2) 126
- 3) 168
- 4) 252

10. In the figure below, not drawn to scale, AB and CD are straight lines.  $\angle b$  is the same with another angle. Find this similar angle.



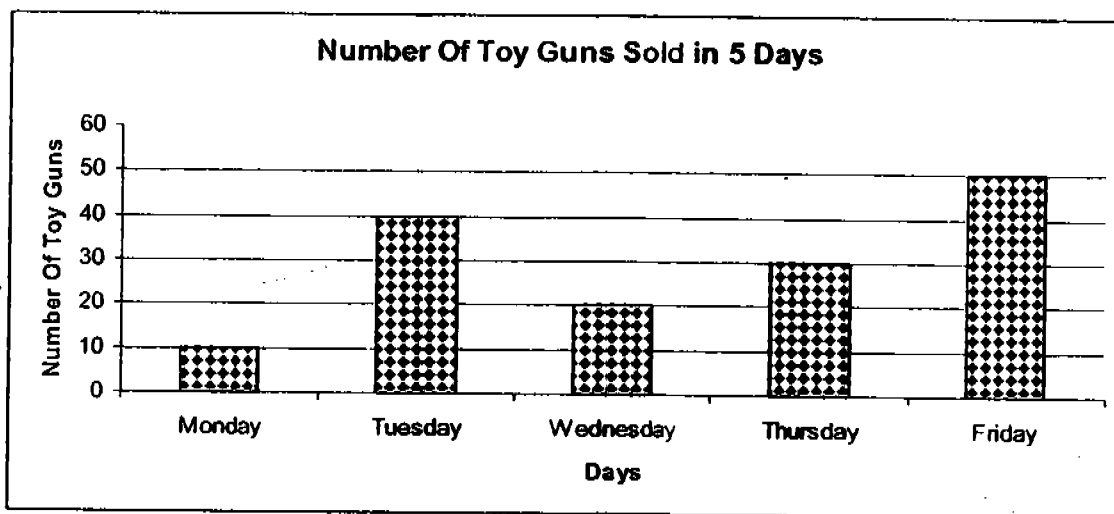
- 1)  $\angle a$
- 2)  $\angle c$
- 3)  $\angle d$
- 4)  $\angle e$

11. Mother had 8 m of cloth. She used  $\frac{1}{4}$  of it to make a blouse and  $\frac{3}{5}$  of the remainder to make a dress. What fraction of the cloth did she use to make a dress?
- 1) 2
  - 2)  $2\frac{2}{5}$
  - 3)  $3\frac{3}{5}$
  - 4) 6
12. A piece of ribbon is cut into two pieces. The ratio of the longer piece to the shorter piece is 9 : 5. The difference in the two lengths is 36 cm. Find the length of the original ribbon.
- 1) 126 cm
  - 2) 186 cm
  - 3) 324 cm
  - 4) 504 cm
13. At a book fair, plastic files were sold in set of 6. Each set costs \$2. George has \$17.20. What is the maximum number of plastic files can he buy?
- 1) 42
  - 2) 48
  - 3) 51
  - 4) 52



14. A container is  $\frac{1}{6}$  full of orange juice. When 2 l of orange juice is added to it, the container becomes  $\frac{2}{3}$  full. What is the capacity of the container?
- 1) 3 l
  - 2) 4 l
  - 3) 6 l
  - 4) 8 l

15. The bar graph below shows the number of toy guns sold from Monday to Friday. Study the bar graph carefully and answer the question below.



If each toy gun was sold for \$1.50, what was the total sale for the 5 days?

- 1) \$75
- 2) \$135
- 3) \$150
- 4) \$225





**ANGLO CHINESE SCHOOL  
(PRIMARY)**

**END-OF-YEAR EXAMINATION 2005  
MATHEMATICS**

**Booklet B**

Name: \_\_\_\_\_ (     )

Class: Primary 5

Date: 26 October 2005

Duration of Booklet A & B: 2 hr 15 mins

Nos	Contents	Marks	Marks Obtained
A	Multiple Choice Questions	20	
B	Short Answers: Part I	10	
	Short Answers: Part II	20	
C	Problem Sums	50	
Total Marks		100	
Parents' signature			

**THIS BOOKLET CONTAINS PAGE 7 to 25.  
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**SECTION B - Short Answers (30 MARKS)**

**Part I (10 × 1 mark)**

Questions 16 to 25 carry 1 mark each. Write your answer in the space provided. Give your answers in the units stated.

16. How many lines of symmetry are there in an equilateral triangle?

Answer : \_\_\_\_\_

17. How much water can be collected from a tap in 12 minutes if the water is flowing from the tap at the rate of 69 litres every 3 minutes?

Answer : \_\_\_\_\_ litres

18. Express  $\frac{49}{1000}$  as a decimal.

Answer : \_\_\_\_\_

19. What is the third multiple of 12?

Answer : \_\_\_\_\_

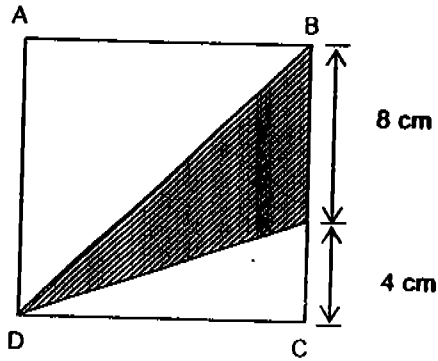
20. Find the value of  $\frac{8}{9} \div 16$ .

Answer : \_\_\_\_\_

21. There are 56 oranges and apples in a box altogether. If there are 12 more apples than oranges, find the ratio of the number of apples to the number of oranges.

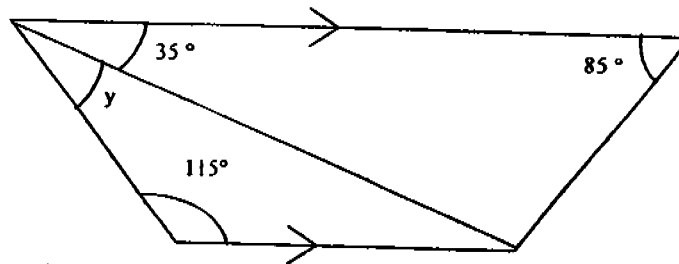
Answer : \_\_\_\_\_

22. In the figure below, find the area of the shaded part in the square ABCD.



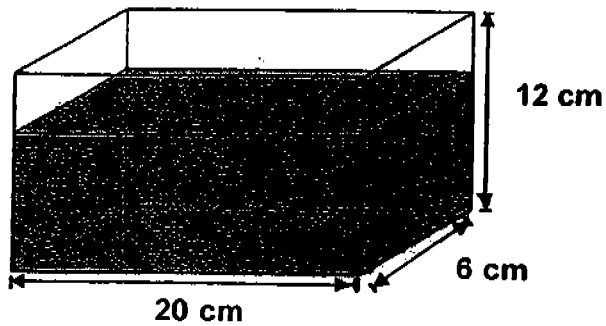
Answer : \_\_\_\_\_  $\text{cm}^2$

23. In the figure below, not drawn to scale, find  $\angle y$ .



Answer : \_\_\_\_\_  $^\circ$

24. A tank measuring 20 cm by 6 cm by 12 cm is filled with  $600 \text{ cm}^3$  of water. Find the height of the water level in the tank.



Answer : \_\_\_\_\_ cm

25. Peter is  $\frac{3}{5}$  as heavy as John. Their average weight is 40 kg. What is John's weight?

Answer : \_\_\_\_\_ kg

**Part II (10 × 2 marks)**

Questions 26 to 35 carry 2 marks each. **Show all workings clearly.**  
Write your answer in the space provided. Give your answers in the units stated.

26. Mrs Wu bought a refrigerator which cost \$900. In addition, she had to pay 5% GST. How much did she pay for the refrigerator?

Answer : \$ \_\_\_\_\_

27. Strawberries are sold at \$0.65 per 100 g at a supermarket. What is the price of 2 kg of strawberries?

Answer : \$ \_\_\_\_\_

28. 4 photo frames and 3 pens cost \$22. One photo frame and one pen cost \$6. What is the cost of 1 pen?

Answer : \$ \_\_\_\_\_

29. The table below shows the rates of a car park in a shopping mall.

Parking Charges	
For the first hour	\$2
For every subsequent $\frac{1}{2}$ hour or part thereof	\$1

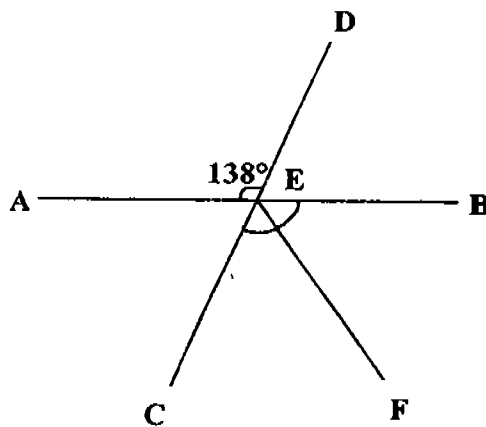
How much must Susan pay if she parks her car in the car park from 2.30 p.m. to 5.00 p.m.?

Answer : \$ \_\_\_\_\_

30. In a class of 45 pupils,  $\frac{3}{5}$  of them joined a line-dancing course. Of these,  $\frac{2}{3}$  were boys and the rest were girls. How many girls in the class joined the line-dancing course?

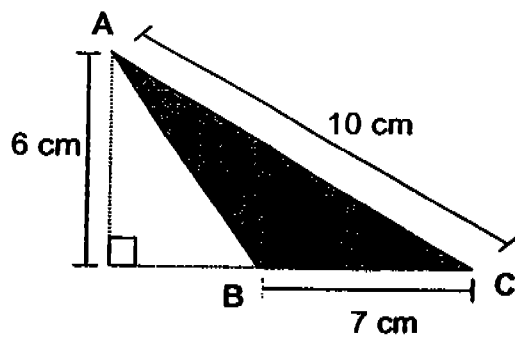
Answer: \_\_\_\_\_

31. In the figure below, not drawn to scale, AEB and CED are straight lines.  $\angle CEF = \angle FEB$ . Find  $\angle FED$ .



Answer : \_\_\_\_\_°

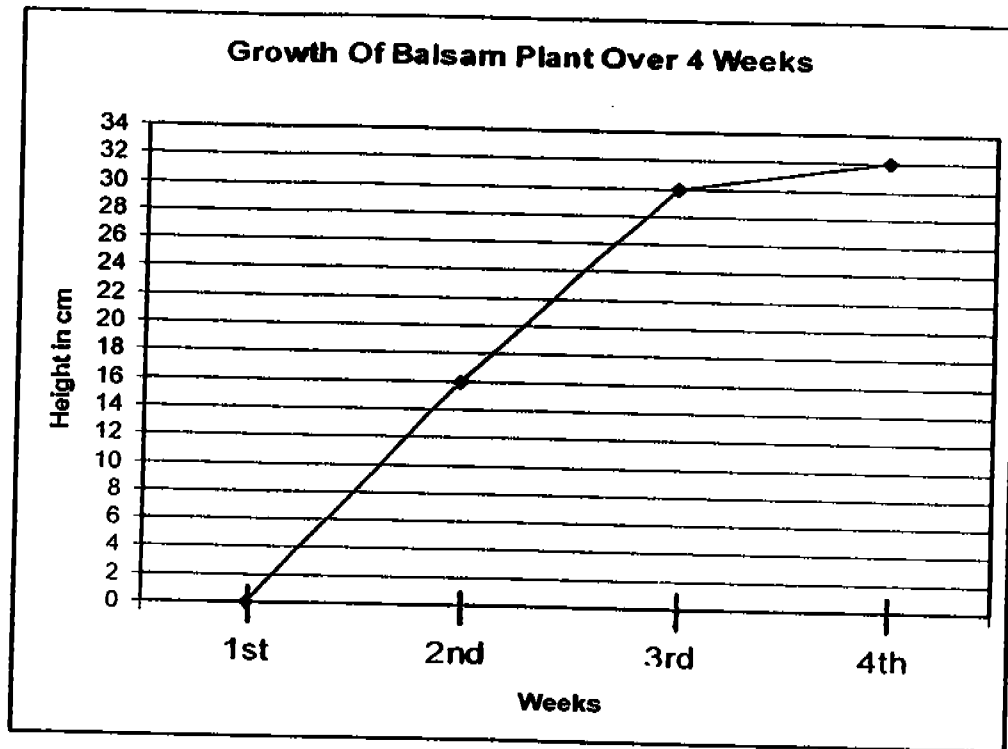
32. Find the area of triangle ABC.



Answer : \_\_\_\_\_ cm<sup>2</sup>



33. The height of a balsam plant was measured on every Sunday for 4 weeks. The line graph below shows the growth of the plant in terms of its height.



- (a) During which one-week period was the growth the most?  
(b) Between the 2nd and the 3rd week, what was the average growth in cm per day?

Answer: (a) Between \_\_\_ week and the \_\_\_ week

(b) \_\_\_\_\_ cm

34. A box containing 4 identical books weighs 2.4 kg. The same box containing 8 such books weighs 3.9 kg. What is the weight of the box?

Answer : \_\_\_\_\_ kg

35. Mr Lee took 34 pupils to Jurong Bird Park for an excursion. On the average, each pupil spent \$9. There were 8 boys in the class. The girls spent \$130 altogether. On the average, how much did the boys spend?

Answer : \$ \_\_\_\_\_

**SECTION C - Problem Sums (50 MARKS)**

For each question from 36 to 48, show your working and mathematical statements clearly in the space below each question. Write your answer in the answer space provided. Marks awarded are shown in the brackets [ ].

36. Tony had \$176. After spending some of his money on a pair of sports shoes and a badminton racket, he had \$23 left. If he spent twice as much on the pair of sports shoes than on a badminton racket, how much did the badminton racket cost?

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Answer : \_\_\_\_\_ [3]

37. Marcus, Larry and Joe shared some stickers. On average, each boy had 42 stickers. After each boy bought another 20 stickers, the ratio of Marcus's stickers to Larry's to Joe's is 2 : 1 : 3. How many stickers did Larry have now?

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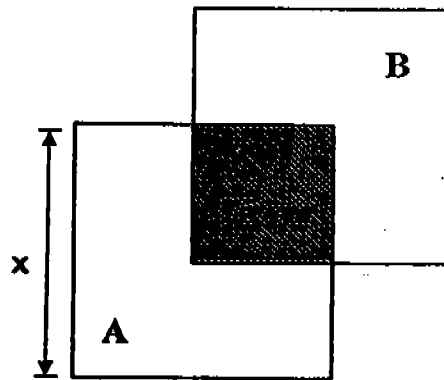
Answer : \_\_\_\_\_ [3]

38. 60% of the chalks in a box are red, 25% are yellow and the rest are blue. If there are 90 pieces more red chalks than blue chalks, how many pieces of red and yellow chalks are there altogether?



Answer : \_\_\_\_\_ [3]

39. Two identical big squares A and B overlap to form a small square of area  $25 \text{ cm}^2$ . The ratio of the shaded area to the unshaded area is 5 : 30. Find the length of  $x$ .



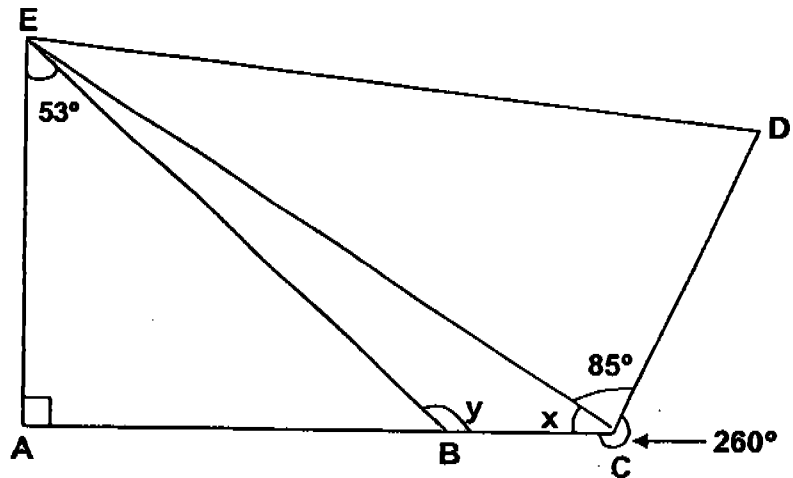
Answer : \_\_\_\_\_ [3]

40. Fence posts are placed round a rectangular field 100 m by 60 m. The posts are placed 10 m apart with a post at each corner. How many posts are needed in all?

Answer : \_\_\_\_\_ [3]

41. In the figure (not drawn to scale),  $\overline{ACD}$  is a straight line.

- a) Find  $\angle x$ .  
b) Find  $\angle y$ .

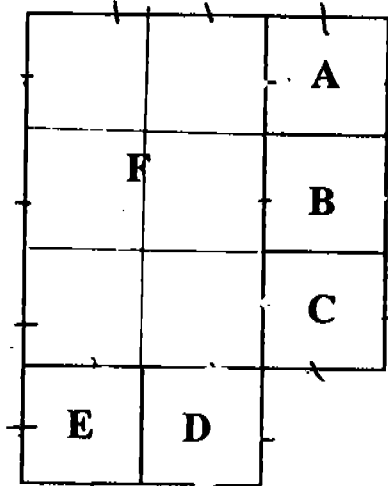


Answer : (a) \_\_\_\_\_ [1]

(b) \_\_\_\_\_ [2]

42. The figure below is made up of 5 identical squares A, B, C, D and E and a rectangle F. The area of rectangle F is  $54 \text{ cm}^2$ .

- a) Find the area of the whole figure.  
 b) Find the perimeter of the whole figure.



Answer : (a) \_\_\_\_\_ [2]

(b) \_\_\_\_\_ [2]

43. Mr Lim wants to buy a plasma television. The selling price of the plasma television is \$5 000. A discount of 8% is given if Mr Lim pays in cash. If he wishes to pay by installments, there will be no discount but he has to pay a 10% down payment and monthly installments of \$400 for 12 months. How much will Mr Lim save if he pays in cash instead of paying by installments?

Answer : \_\_\_\_\_ [4]

44. David and Lawrence had 152 pens altogether. After David had used  $\frac{3}{5}$  of his pens, he had  $\frac{4}{9}$  as many pens as Lawrence.

- (a) How many pens did Lawrence have at first?
- (b) How many pens must Lawrence give to David so that they will now have an equal number of pens?

Answer : (a) \_\_\_\_\_ [2]

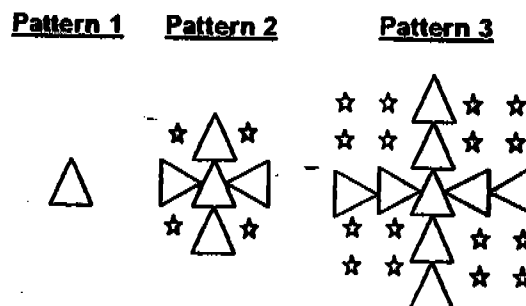
(b) \_\_\_\_\_ [2]

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45. Study the table and pattern carefully and the questions that follow.

Pattern Number	Number of Triangles	Number of Stars
Pattern 1	1	0
Pattern 2	5	4
Pattern 3	9	16
Pattern 4	13	<hr/> a [1]



- Complete the table above.
- How many triangles are there in Pattern 20?
- In Pattern 8, how many more stars than triangles are there?

46. An empty rectangular tank has a base measuring 180 cm by 50 cm. When 54 000 cm<sup>3</sup> of water is added, the water level rises to  $\frac{3}{7}$  of the height of the container.

- a) Find the height of the tank.
- b) How much more water can the tank hold?

Answer : (a) \_\_\_\_\_ [3]

(b) \_\_\_\_\_ [2]

47. 46% of the books in a bookshop are English books. The rest are Chinese and Malay books. The ratio of the number of Chinese books to the number of Malay books is 2 : 7. There are 90 more English books than Malay books.

- a) What percentage of the books are Malay books?
- b) How many books are there altogether?

Answer : (a) \_\_\_\_\_ [3]

(b) \_\_\_\_\_ [2]

50

48. At a class party, Linda had a bag of sweets. If each pupil receives 10 sweets, Linda is left with 34 sweets. If each pupil receives 12 sweets, Linda is short of 48 sweets.

a) How many pupils are there in the class?

b) How many sweets does Linda have?

a) \_\_\_\_\_

b) \_\_\_\_\_

Answer \_\_\_\_\_ [5]

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**END OF PAPER**  
**Check your work carefully!**

Setter: Mrs F Hussain  
Vetted By: Pr 5 Math Teachers (2005)

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**Anglo-Chinese Primary School**  
**Primary 5 Maths SA2 Exam (2005)**

*Exam Solutions*

**Answer Sheets**

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

- |   |  |
|---|--|
| <p>16. 3</p> <p>17. 276</p> <p>18. 0.049</p> <p>19. 36</p> <p>20. <math>\frac{1}{18}</math></p> <p>21. 17 : 11</p> <p>22. 48</p> <p>23. 30°</p> <p>24. 5</p> <p>25. 50</p> <p>26. \$945</p> <p>27. \$13</p> <p>28. \$2</p> <p>29. \$5</p> <p>30. 9 girls</p> <p>31. 111</p> <p>32. 21</p> | <p>33. a) 1<sup>st</sup> 2<sup>nd</sup>      b) 2</p> <p>34. 0.9</p> <p>35. \$22</p> <p>36. \$51</p> <p>37. 31 stickers</p> <p>38. 170 chalks</p> <p>39. 10cm</p> <p>40. 32 posts</p> <p>41. a) 15°      b) 143°</p> <p>42. a) 99cm<sup>2</sup>      b) 42cm</p> <p>43. \$700</p> <p>44. a) 72 pens      b) 20 pens</p> <p>45. a) 36      b) 77 triangles</p> <p>      c) 167 more stars</p> <p>46. a) 14cm      b) 72000cm<sup>3</sup> or 72ℓ</p> <p>47. a) 42%      b) 2250 books</p> <p>48. a) 41 pupils      b) 444 sweets</p> |
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