ANGLO CHINESE SCHOOL
(PRIMARY)

MID-YEAR EXAMINATION 2005
MATHEMATICS

Booklet A

Name: _____ (   )

Class: Primary 5_____

Date: _____

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.   The digit '2' in 5 249 816 is in the _____ place.

   1)   hundreds
   2)   thousands
   3)   ten thousands
   4)   hundred thousands

2.   What is the value of six million, nine thousand, three hundred and
     twenty-one?

   1)   69 321
   2)   690 321
   3)   6 009 321
   4)   6 090 321

3.   84 × 70 = _____

   1)   8 × 470
   2)   847 × 10
   3)   84 × 7 + 10
   4)   (80 × 70) + (4 × 70)

4. $\dfrac{5}{6} + \dfrac{3}{4} = $ _____ ?
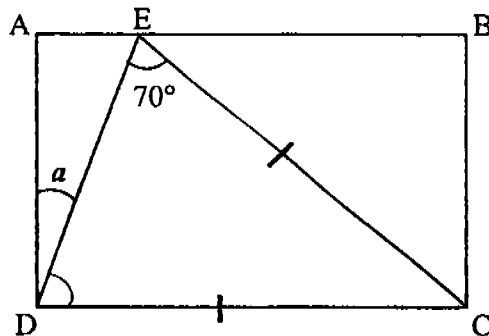
    1) $\dfrac{5}{6} + \dfrac{5}{6}$

    2) $\dfrac{5}{12} + \dfrac{3}{12}$

    3) $\dfrac{10}{12} + \dfrac{9}{12}$

    4) $\dfrac{11}{12} + \dfrac{11}{12}$

5. In the diagram below, ABCD is a rectangle and CDE is an isosceles triangle. Find $\angle a$. (The diagram is not drawn to scale).

    1)   20°
    2)   30°
    3)   40°
    4)   70°

6. Find the sum of 73 124 and 6 989. Round off your answer to the nearest 1 000.

    1)   14 300
    2)   79 900
    3)   80 000
    4)   80 110

2

7. Madam Tay sold 3 jars and 1 glass for $63. Each jar costs twice as much as a glass. How much is 1 jar?

   1) $9
   2) $12.60
   3) $15.75
   4) $18

8. $2\frac{1}{4}$ hour = _____ minutes

   1) 135
   2) 145
   3) 204
   4) 225

9. What is the missing number?

   $8\ 670 \div 51 = $ _____?_____ $\times 10$

   1) 17
   2) 107
   3) 170
   4) 171

10. Mr Tan earns $850 per month. He spent $500 and saves the rest. What is the ratio of the amount of money saved to the amount of money earned?
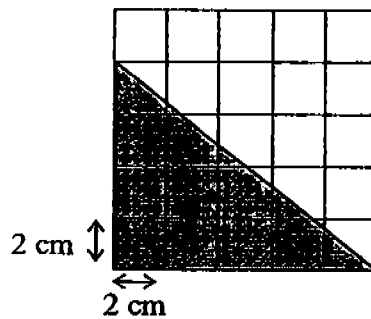
    1) 7 : 10
    2) 7 : 17
    3) 17 : 7
    4) 17 : 10

11. Jon spent half of his money on a bag and $\frac{1}{4}$ of the remaining money on a shirt. If he had $96 at first, how much did he spend altogether?

   1) $36
   2) $48
   3) $60
   4) $72

12. Find the value of $(46 + 64) \div 2 - 4 \times 3$

   1) 33
   2) 43
   3) 153
   4) 165

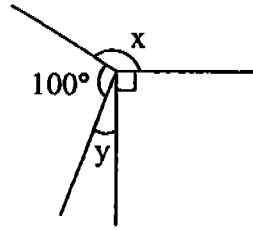13. The following grid is made up of 2 - cm squares. Find the area of the shaded triangle.

2 cm ↕

2 cm ↔

   1) 10 cm^2
   2) 20 cm^2
   3) 40 cm^2
   4) 80 cm^2

14. The ratio of Carol's age to Fatimah's age to Jenny's age is 3 : 7 : 4. If Fatimah is 21 years old now, what is their total age in two years' time?

    1) 42
    2) 44
    3) 48
    4) 60

15. In the figure, ∠x is four times the size of ∠y. Find ∠x.

    1) 34°
    2) 64°
    3) 136°
    4) 170°
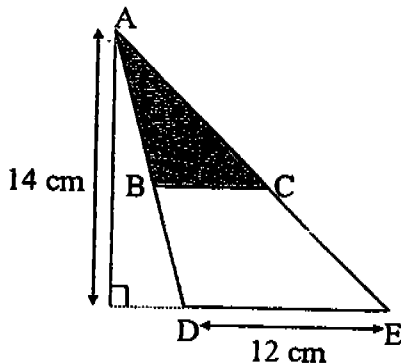
5

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.   Find the value of $2\frac{1}{7} + \frac{5}{4}$. Give your answer to the **simplest form**.

Answer : _____

17.   The area of triangle ABC is half of the area of triangle ADE. Find the area of triangle ABC. (Not drawn to scale)
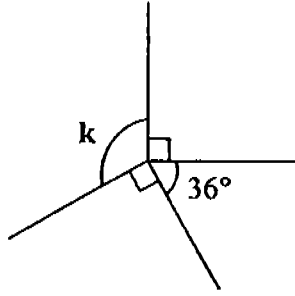

Answer : _____ cm^2

18.   Jack bought 6 apples, 27 pears and 33 mangoes. He ate 3 pears and gave away 3 mangoes. What is the ratio of the numbers of apples to the numbers of pears to the numbers of mangoes now?

Answer : _____

6

19. In the figure, not drawn to scale, find the value of ∠k.

Answer : _____ °

20. Kelvin bought 2460 cookies. He packed 9 cookies into each jar. How many jars did he use to pack all the cookies?

Answer : _____

21. In the product of 820 × 36, digit _____?_____ is in the thousands place.
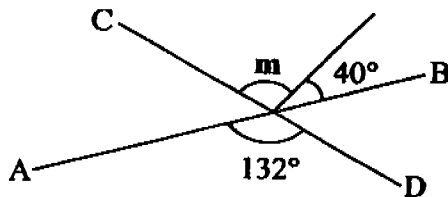
Answer : _____

7

22. The age of Zen and Gordan is $1\frac{1}{2}$ years old and $3\frac{1}{2}$ years old respectively. Express the ratio of Zen's age to Gordan's age.

Answer : _____ _____

23. Find the difference between $4\frac{3}{4} - 3\frac{2}{5}$.

Answer : _____

24. In the figure, not drawn to scale, AB and CD are straight lines. Find $\angle$m.

Answer :_____°

25.   Express $\dfrac{18}{4} \div 3$ in the **simplest form**.

Answer : _____

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.   A typist is paid $174 for 2 weeks of work. How much will he be paid for 7
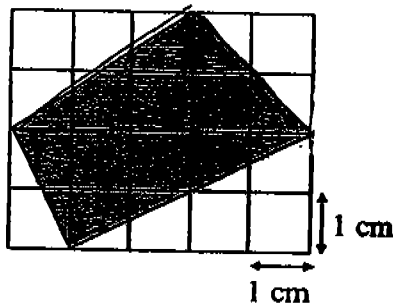   weeks of work?

Answer : $ _____

27.   When I am divided by 16, the quotient is 206 with a remainder of 7. What
        number am I?

Answer : _____

28.   The ratio of Alan's money to Bernard's money is 3 : 5. They have $560 altogether. How much will Alan have after Bernard gave him $40?

Answer : $ _____

29.   Find the area of the **shaded region**.

1 cm

1 cm

Answer : _____ cm^2

30.   Michael is 12 years old now. His father is 3 times as old as Michael. Find the ratio of Michael's age to his father's age in 8 years' time.

Answer : _____

31. $3\frac{1}{4}$ km = $\boxed{?}$ m

Answer : _____

32. In a class of 48 pupils, the ratio of the number of boys to the number of girls is 5 : 3. If half the girls wear spectacles, how many girls do not wear spectacles?

Answer : _____

33. A shop owner bought 540 cups. He sold 12 cups for $9. How much did he receive after selling all the cups?

Answer : $ _____

34.   The sum of two numbers is 2 516. If one of the numbers is thrice the other, what is the value of the greater number?

Answer : _____

35.   What is the area of a square of side $\frac{7}{8}$ m?

Answer : _____ m^2

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. Find the sum of $1 + 2 + 3 + \ldots + 48 + 49 + 50$.

Answer : _____ [3]

37. Keeve had $450 at first. He spent $\frac{2}{5}$ on the meal and $\frac{1}{2}$ on transport. How much money was left?

Answer : _____ [3]

13

14

38.   An ice cream and two waffles cost $6.80. A waffle costs $0.40 more than an ice cream. Find the cost of a waffle.

Answer : _____[3]

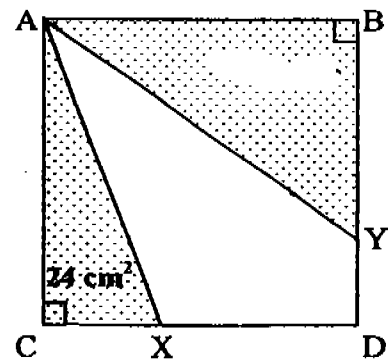39.   Simon had $55 and James had $160. Each year, their father gave Simon and James an equal amount of money. After one year, Simon would have half as much money as James. How much would their father have given them altogether?

Answer : _____[3]

40. The number of red watches to the number of blue watches to the number yellow watches are in the ratio 2 : 5 : 8. After Mr Lee sold $\frac{1}{4}$ of the yellow watches, he had 56 more yellow watches than red watches. Find the total number of watches at first.

Answer : _____ [3]

41. ABCD is a square with side of 12 cm. The area of ACX is 24 cm^2.
   a) Find the length of CX.
   b) Triangle ABY is twice the area of ACX. Find the area of the **unshaded** region.

Answer : (a) _____ [1]

(b) _____ [2]

42. Jack has three times as many buttons as Sam. Jack has twice as many buttons as Larry. Jack and Sam have 9600 buttons altogether.
   a) How many buttons does Larry have?
   b) Find the total number of buttons the 3 boys have after Jack gave away 1 400 buttons.

Answer : (a) _____ [2]

(b) _____ [2]

43. Tom, Ali and Paul shared some marbles in the ratio of 2 : 3 : 6 respectively. Ali received 36 marbles.
   a) How many more marbles does Paul have than Tom?
   b) What is the ratio of the number of Ali's marbles to the number of Paul's marbles if Paul gives 6 marbles to Ali?
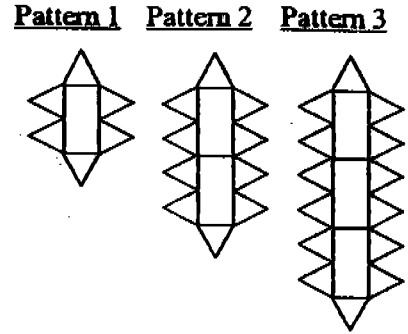
Answer : (a) _____ [2]

(b) _____ [2]

44. There are 4000 cows and ducks in a farm. If there are 10 800 legs altogether, how many cows are there in a farm?
(Hint: Guess and Check)

Answer : _____ [4]

45.   Study the table carefully.

Pattern Number	Number of rectangles	Number of triangles
Pattern 1	1	6
Pattern 2	2	10
Pattern 3	3	14
Pattern 4	4	
Pattern 5	5	

Pattern 1   Pattern 2   Pattern 3

a)   Complete the table above.   [1]
b)   Which Pattern number will have 42 triangles?
c)   In Pattern 15, how many **more triangles** than rectangles are there?

Answer : (b) _____ [1]

(c) _____ [3]

46. Mrs Lim ordered 78 cartons of pens for $480. There are 24 pens in each carton. She sold half the pens at 3 for $2 and the rest at 4 for $3. How much was her profit in all?

Answer : _____ [5]

47. Pail P and Q contained some water. $\frac{3}{4}$ of the water in Pail P was poured to Pail Q. The amount of water left in Pail P is $\frac{1}{7}$ of the amount of water in Pail Q now. Then, $\frac{5}{14}$ of the water in Pail Q was transferred back into Pail P. There is 0.6 *l* more water

in Pail Q than in Pail P now.

a) How much litres of water did Pail Q have now?
b) How much litres of water was there in Pail Q at first?
   (Hint: Draw a Model)

Answer : (a) _____ [3]

(b) _____ [2]

21

48. At Baba Shopping center, $\frac{1}{8}$ of the patrons are children. The ratio of the number of men to the number of women is 5 : 9. The ratio of the number of boys to the number of girls is 2 : 3.

a) What is the ratio of the number of children to the number of men to the number of women?

b) There are 360 more women than men. How many boys were there at the shopping center?

Answer : (a) _____ [2]

(b) _____ [3]

END OF PAPER

Setter: Ms Yvonne Teo
Vetted by: P5 Math Teachers

Anglo-Chinese Primary School

Primary 5 Maths SA1 Exam (2005)

Exam Sheet

Answer Sheets

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

16. $3\frac{11}{28}$

17. 42

18. 1 : 4 : 5

19. 144

20. 274

21. 9

22. 3 : 7

23. $1\frac{7}{20}$

24. 92

25. $1\frac{1}{2}$

26. 609

27. 3303

28. 250

29. 10

30. 5 : 11

31. 3250m

32. 9

33. 405

34. 1887

35. $\frac{49}{64}$

36. 1275

37. $45

38. $2.40

39. $100

40. 210

41. a) 4cm   b) 72cm²

42. a) 3600   b) 11800

43. a) 48   b) 7 : 11

44. 1400

45. a) Pattern 10   b) 47

46. $846

47. a) 2.7ℓ   b) 2.4ℓ

48. a) 1 : 5 : 9   b) 72 boys