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Anglo-Chinese School (Junior)

SEMESTRAL ASSESSMENT 2 (2016)

PRIMARY 5

MATHEMATICS

PAPER 1

Booklet A

Tuesday   **1 November 2016**   **50 min**

Name: _____ (   )

Class: 5. (   )

INSTRUCTIONS TO PUPILS

1   Do not·turn over the pages until you are told to do so.

2   Follow all instructions carefully.

3   Answer ALL questions.

4   Shade your answers in the Optical Answer Sheet (OAS) provided.

5   You are **not** allowed to use a calculator for this paper.

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

1.   463 771 , 463 871 , 463 971 , _____ .
     What is the missing number in the number pattern?

     1)   463 071

     2)   464 071

     3)   464 171

     4)   464 971

2.   How many tenths are there in 5.38?

     1)   3

     2)   38

     3)   53.8

     4)   5.38

3.   Which of the following is nearest to 3?

     1) $2\frac{1}{3}$

     2) $2\frac{7}{9}$

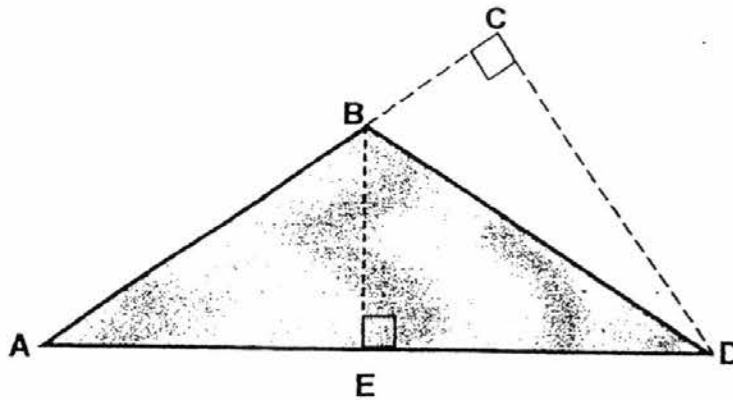   3) $3\frac{2}{5}$

     4) $3\frac{2}{7}$

4.   Express 2.03 ℓ in millilitres.

     1)   2.03 ml

     2)   203 ml

     3)   2030 ml

     4)   20300 ml

5. What is the difference between 6.25 kg and 8 kg 50 g?
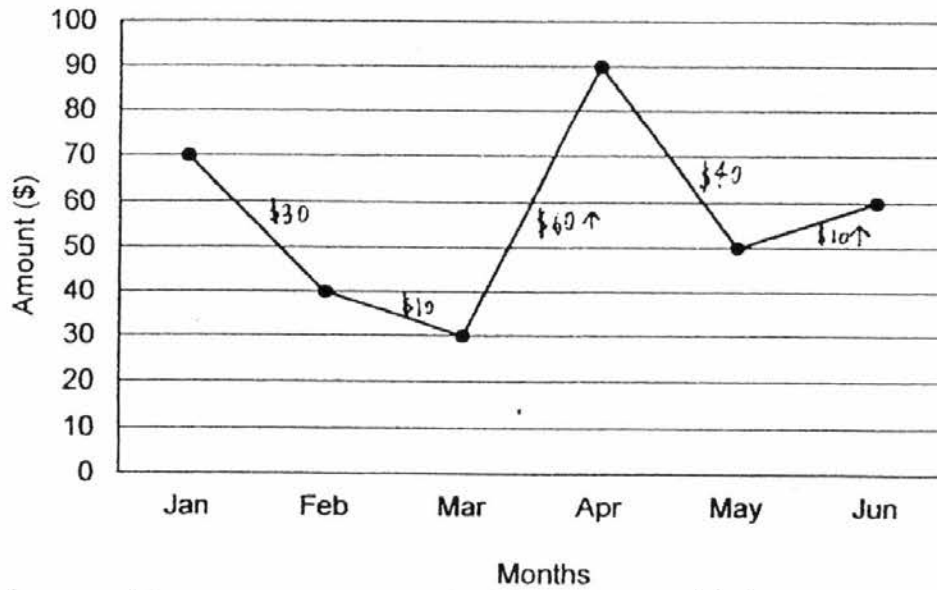
    1)   1.8 kg
    2)   2.25 kg
    3)   5400 g
    4)   7400 g

6. In the figure below, if CD is the height of Triangle ADB, what is the base of the triangle?
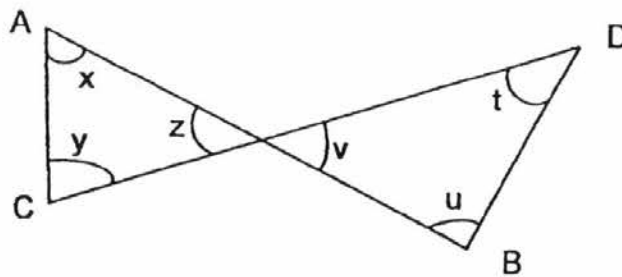

    1)   AB
    2)   AC
    3)   AD
    4)   BD

7. The line graph shows the amount of utilities bills paid by Mr Kang's household in the first six months of the year.

The greatest decrease in the utilities bills is

_____.

1) from Jan to Feb

2) from Feb to Mar

3) from Mar to Apr

4) from Apr to May

8. In the figure below, AB and CD are straight lines. Which pair of angles are equal?

1) ∠x and ∠u

2) ∠y and ∠t

3) ∠z and ∠v

4) ∠u and ∠y

9. The figure shows a solid which is formed by using 1-cm cubes. What is the volume of the solid?
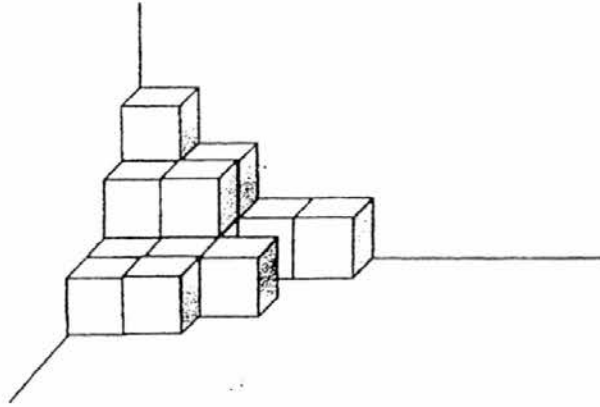
   1)   11 cm^3
   2)   12 cm^3
   3)   15 cm^3
   4)   16 cm^3

10. A stick of length $\frac{7}{8}$ m is cut into 4 equal pieces. What is the length of each piece?

   1) $3\frac{1}{2}$ m

   2) $3\frac{1}{8}$ m

   3) $\frac{7}{32}$ m

   4) $\frac{9}{8}$ m

11. 0.12 x 30 = _____ ÷ 100

   1)   3.6
   2)   36
   3)   360
   4)   3 600

12. After Jimmy has given $320 to Timothy, they each have an equal amount of money. What is the difference in their amount of money at first?

    1) $160
   2) $320
    3) $480
    4) $640

13. Andy wants to make butter cookies using the recipe below.

    RECIPE for BUTTER COOKIES
    (makes 20 cookies)

    125 g butter
    80 g sugar
    215 g flour

    He has 500 g of butter, 250 g of sugar and 1 kg of flour. What is the greatest number of cookies he can make?

    1) 24
    2) 48
    3) 60
    4) 80

14. $\frac{2}{5}$ of the pens in a box are blue pens. The remaining pens are made up of equal number of red pens and green pens. What is the percentage of the pens that are green in the box?

    1) 6%
    2) 30%
    3) 40%
    4) 60%

15. The figure below shows a rectangle ABCD being folded along AE. Given that ∠BAE = 20°, find ∠y.
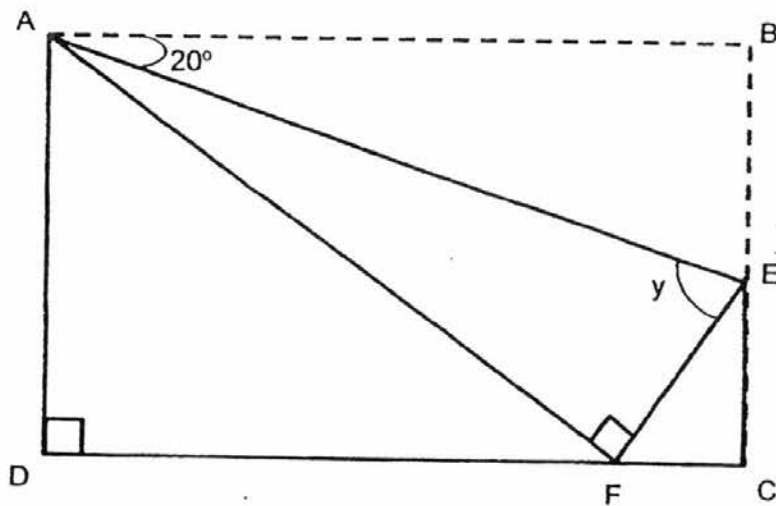
1) 20°

2) 40°

3) 50°

4) 70°

End of Booklet A

Anglo-Chinese School (Junior)

SEMESTRAL ASSESSMENT 2 (2016)
PRIMARY 5
MATHEMATICS
PAPER 1
Booklet B

Tuesday   **1 November 2016**   **50 min**

Name: _____ (   )

Class: 5. (   )

INSTRUCTIONS TO PUPILS

1   Do not turn over the pages until you are told to do so.

2   Follow all instructions carefully.

3   Answer ALL questions.

4   You are **not** allowed to use a calculator for this paper.

This question paper consists of 8 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. Evaluate $94 + (30 - 18 \div 6) \times 7$.

Answer : _____

17. Express $\dfrac{9}{8}$ as a decimal.

Answer : _____

18. Express 7 m 1 cm in metres.

Answer : _____ m

19. Find the value of $4 - \dfrac{1}{3} - \dfrac{2}{5}$

Answer : _____

Sub-Total : [   ]

20. What is the missing number in the box below?
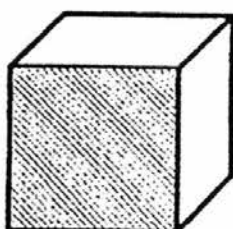
4 : 6 = ☐ : 9

Answer : _____

21. Susan bought a bag at a discount of 15%. The usual price of the bag was $160. How much was the discount?

Answer : $ _____

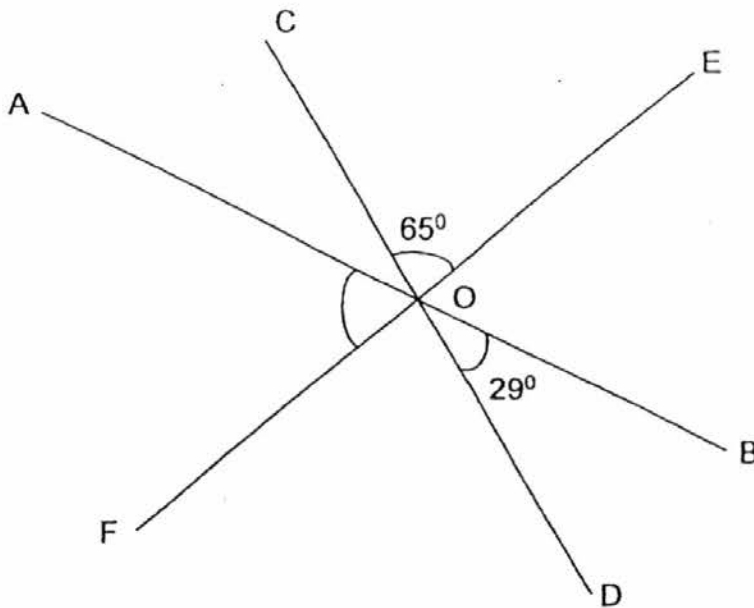22. The shaded part of the cube shown below is 81 cm². What is the volume of the cube?

Answer : _____ cm³

Sub-Total : ☐

23. There are 3 boxes. The mass of Box A is 3.4 kg, the mass of Box B is 5.8 kg and the mass of Box C is 4.2 kg. Which box has its mass nearest to the average mass of the 3 boxes?
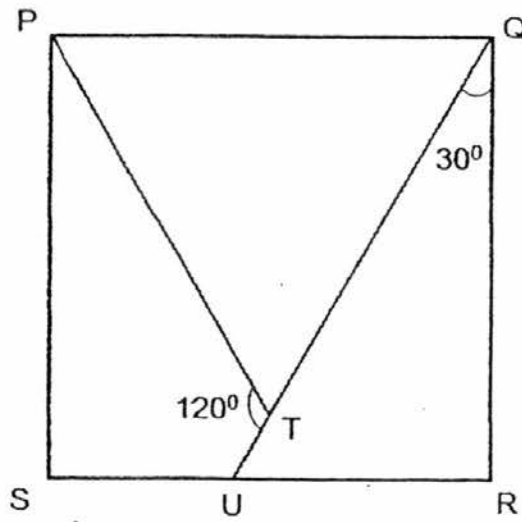
Answer : Box _____

24. In the figure below, AB, CD and EF are straight lines.
   $\angle COE = 65^0$ and $\angle BOD = 29^0$. Find $\angle AOF$.

Answer : _____ ^{0}

25. In the figure below, PQRS is a square. QTU is a straight line.
∠PTU = 120° and ∠RQU = 30°. Find ∠TPQ.

Answer : _____ 0

Questions **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)
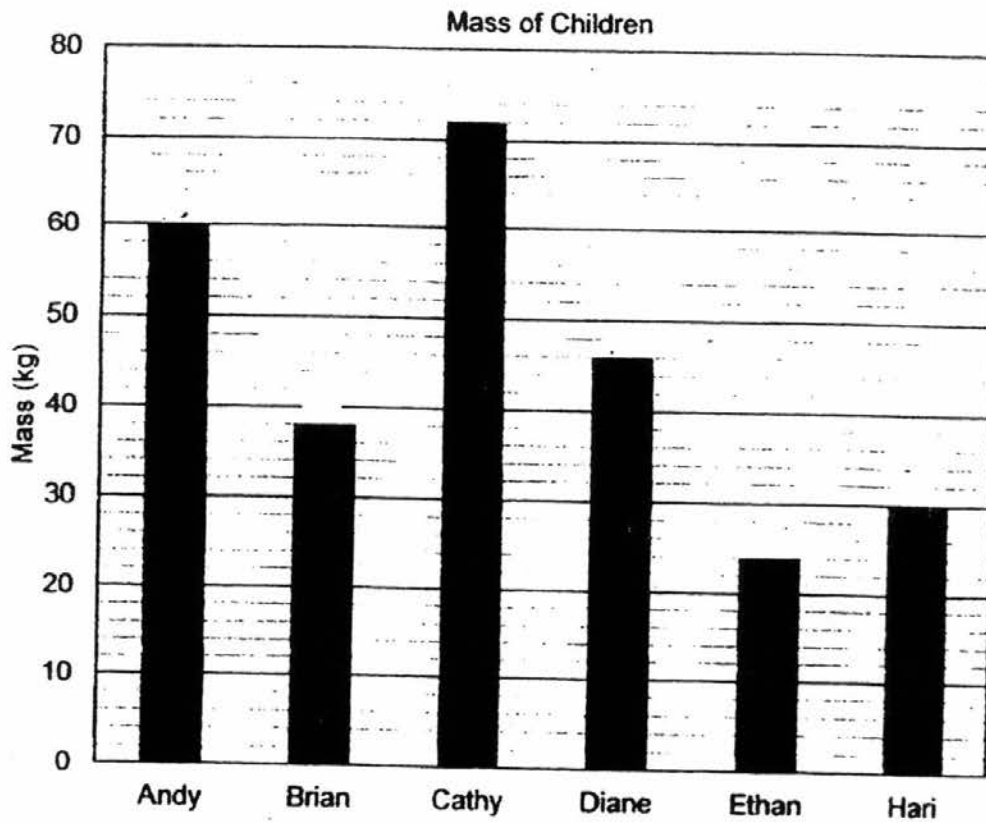
26. John and Albert shared some money in the ratio 5 : 7. John had $180. How much more money did Albert get than John?

Answer : $ _____

27. A dress costs $12 more than a wallet and a shirt costs $8 less than the wallet. Given that the total cost of the 3 items is $70, find the cost of the shirt.

Answer : $_____

28. The graph below shows the mass of 6 children in kilogrammes.
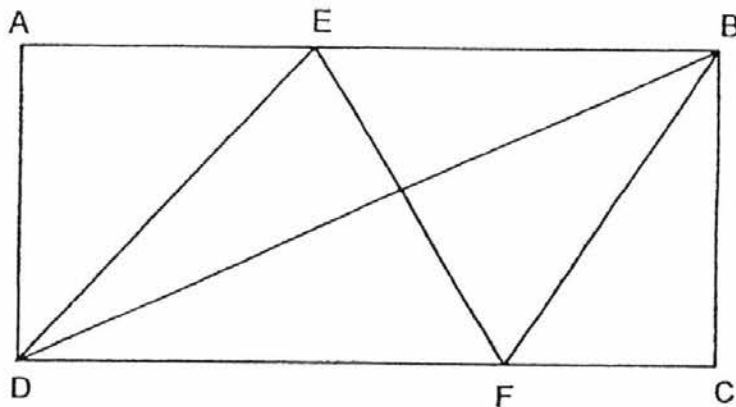

Mass of Children

(a) Who is three times as heavy as Ethan?

Answer: _____

(b) What is the total mass of the 3 heaviest children?

Answer: _____ kg
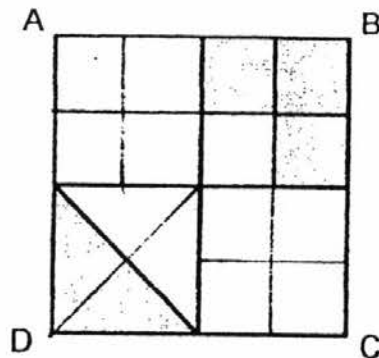
29. In the figure, ABCD is a rectangle with an area of 912 cm². Given that the area of triangle DEF is 358 cm², find the area of triangle BFC.

Answer : _____ cm²

30. A square ABCD is made up of 4 small squares, 2 large squares and 2 large triangles. What is the ratio of the shaded squares to the shaded triangle, as shown in the diagram below?

Answer : _____

End of Booklet B

Anglo-Chinese School (Junior)

SEMESTRAL ASSESSMENT 2 (2016)
PRIMARY 5
MATHEMATICS
PAPER 2

Tuesday   1 November 2016   **1 h 40 min**

Name: _____ (   )

Class: 5.(   )

Parent's Signature: _____

INSTRUCTIONS TO PUPILS

1   Do not turn over the pages until you are told to do so.

2   Follow all instructions carefully.

3   Answer ALL questions.

4   You can use a calculator for this paper.

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

This question paper consists of 16 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.   In a sports hall, $\frac{1}{9}$ of the pupils were boys and the rest were girls. There were

      448 more girls than boys. How many children were there in the sports hall?

                                                                    Ans : _____

2.   There are 21 vanilla cupcakes, 35 banana cupcakes and 56 chocolate cupcakes. All the cupcakes are placed into the least number of boxes such that the number of each type of cupcake is the same in all the boxes. Each box contains 3 different types of cupcakes. How many cupcakes are there in each box?

                                                                    Ans : _____

3. The mass of 24 bottles of juice in a carton is 12.2 kg. The mass of each bottle of juice is 0.48 kg. What is the mass of the empty carton?
(Round off your answer to the nearest tenth.)

Ans : _____ kg

4. The average height of Edwin and Fabian is 1.52 m. Fabian is 22 cm taller. What is Edwin's height? (Express your answer in metres.)

Ans : _____ m

Sub-Total :

5. The figure below consists of 2 squares A and B whose areas are in the ratio of 3 : 1. Given that $\frac{1}{12}$ of square A is shaded, what fraction of square B is shaded?
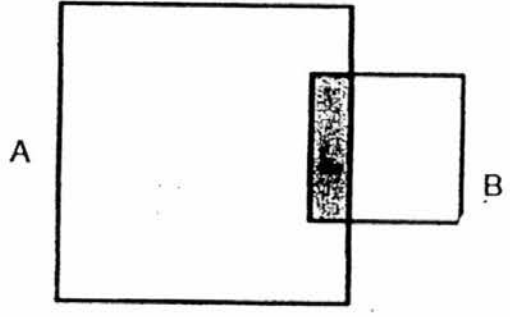
Ans : _____

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. 3 objects X, Y and Z were placed in identical containers and their mass was recorded as shown below. What was the mass of X?


190 g   265 g   325 g
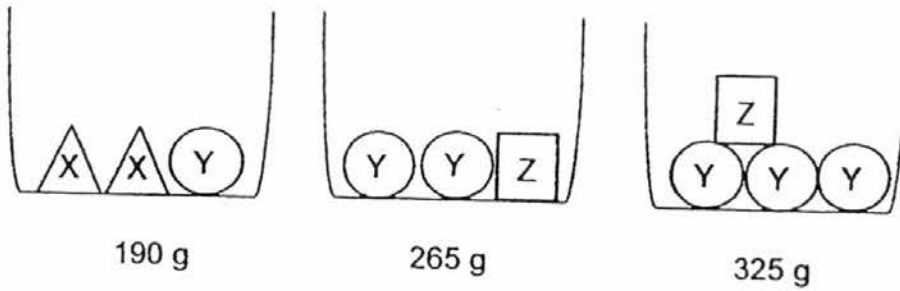
Ans : _____ [3]

7. Alice had $2480. She spent 25% of her money on an air ticket to Bangkok and 14% of the remaining money on a luggage. How much had she left in the end?

Ans : _____ [3]

Sub-Total : [   ]

8. Tank P measuring 40 cm by 24 cm by 36 cm is $\frac{5}{6}$-filled with water. The water is then poured into another tank, Tank Q, measuring 24 cm by 20 cm by 18 cm until it is full. What is the volume of water left in Tank P? Give your answer in cubic centimetres.

36 cm

40 cm

24 cm

Tank P

18 cm

24 cm

20 cm

Tank Q

Ans: _____ [3]

Sub-Total :
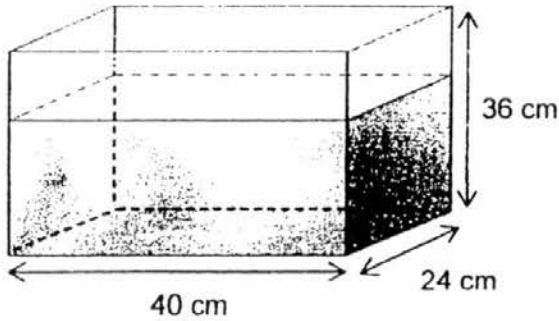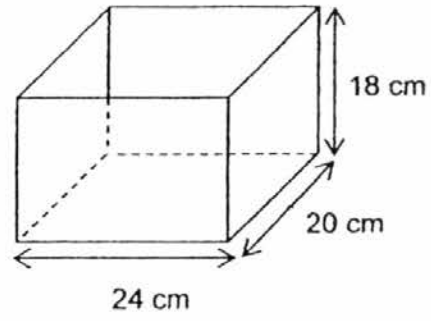
9. There were an equal number of boys in Classes 5A and 5B. $\frac{3}{4}$ of the pupils in Class 5A are boys and $\frac{1}{7}$ of the pupils in Class 5B are girls. Given that there are a total of 12 girls in the two classes, how many pupils are there in 5B?

Ans : _____ [3]

Sub-Total :

10. Jaime has two types of bottles, large and small. He filled 3 large bottles and 7 small bottles with 10.5 ℓ of the drink he made. With the remaining drink, he could not fill another large bottle as he was short of 0.3 ℓ. Thus, he filled another small bottle and had 0.6 ℓ left over.
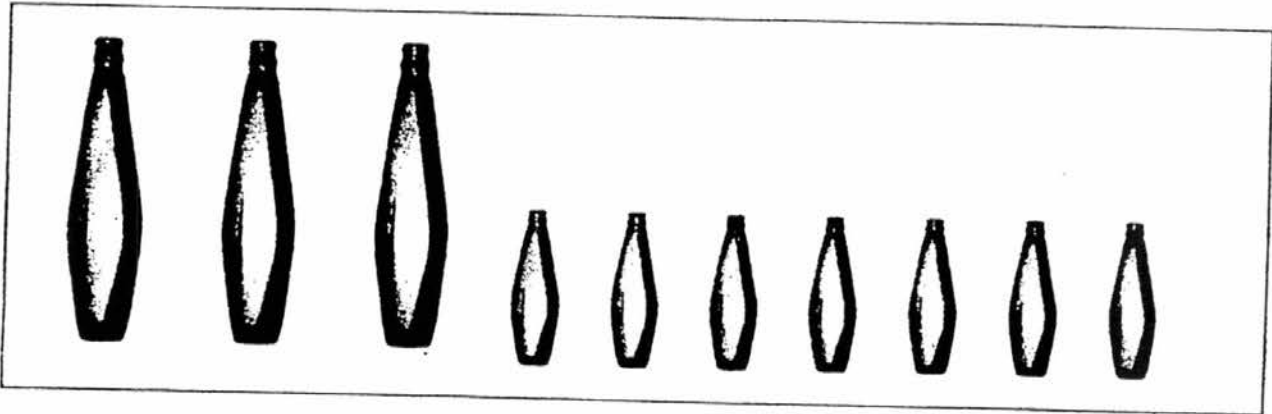
(a) How many litres of drink did the large bottle hold more than the small bottle?

(b) How many litres of drink did a small bottle hold?

(a) _____ [1]

(b) _____ [2]

11. Kelly and Hannah went shopping with a total amount of $165. Kelly spent twice as much as Hannah. The amount Hannah had left was $14 more than what she had spent. She had twice as much money left as Kelly.

   a) How much money did Kelly spend?
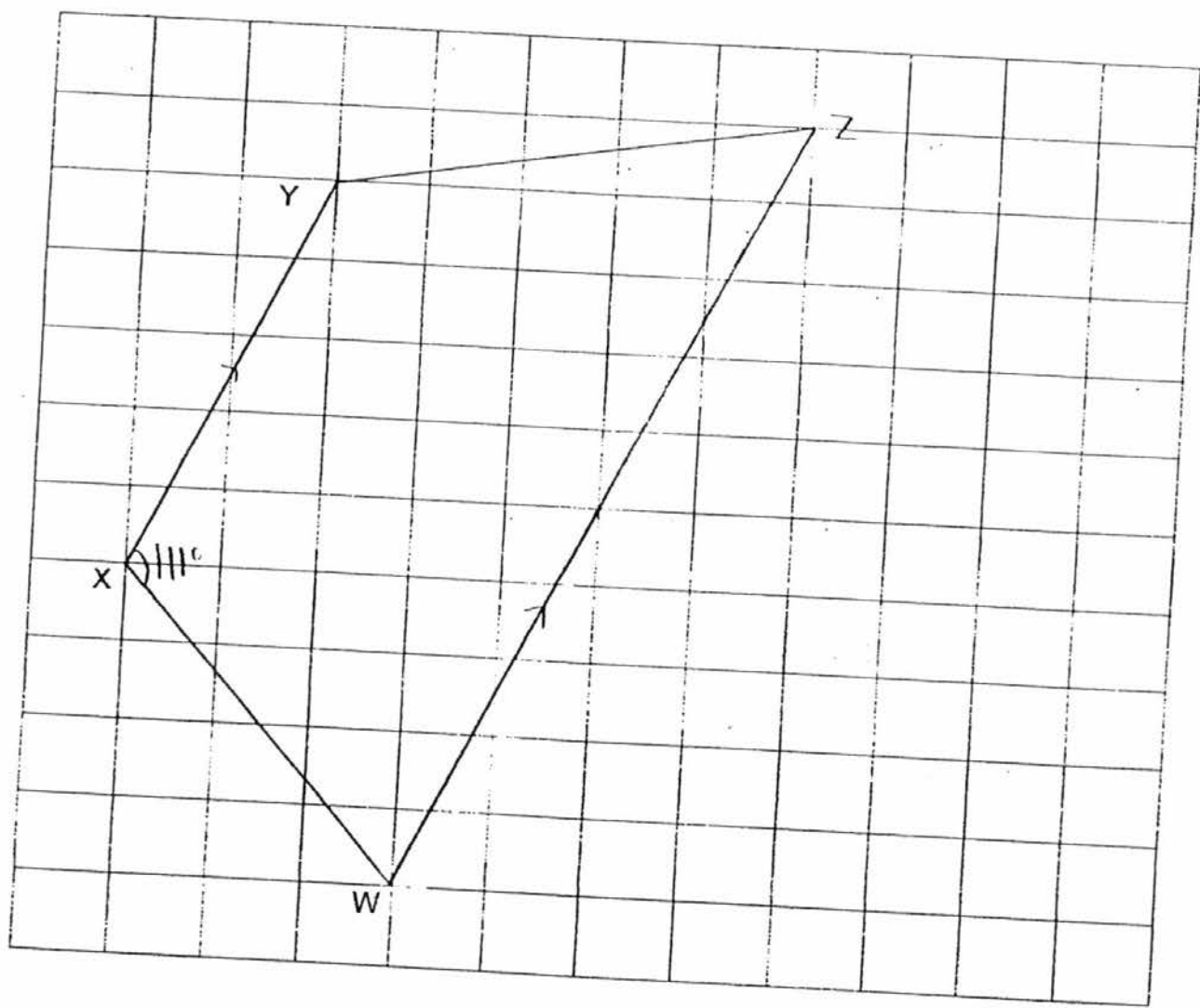   b) How much money did Hannah have at first?

Ans : (a) _____ [3]

(b) _____ [1]

Sub-Total :

12. In the square grid below, XY and YZ are straight lines.

(a) Measure and write down the size of ∠WXY.

(b) WX and XY form 2 sides of a trapezium WXYZ.
WZ is parallel to XY and twice the length of XY.
Complete the drawing of trapezium WXYZ.

Ans: (a) _____ [1]

(b) [3]

Sub-Total :

13. Sweet Bakery baked 520 tarts. 30% of them were kiwi fruit tarts and the rest were blueberry tarts.

(a) How many kiwi fruit tarts did Sweet Bakery bake?

(b) Some blueberry tarts were sold. In the end, $\dfrac{5}{11}$ of the tarts left were blueberry tarts. How many blueberry tarts were sold?

Ans : (a) _____[1]

(b) _____ [3]

14. A sum of $496 is shared by a group of people. $\frac{2}{3}$ of the people received $4 each. $\frac{1}{4}$ of the remainder received $6 each and the rest received $8 each.

   (a) What fraction of this group of people received $8?

   (b) How many people were there altogether?

Ans: (a) _____ [1]

(b) _____. [3]

Sub-Total :

15. The figure below is not drawn to scale. ABCD is a rectangle. M is the midpoint of AB and N is the midpoint of DC. Given that AE = FD = BG = HC and EF = GH = 4 cm, find the area of the shaded part.

Ans : _____ [4]

Sub-Total :
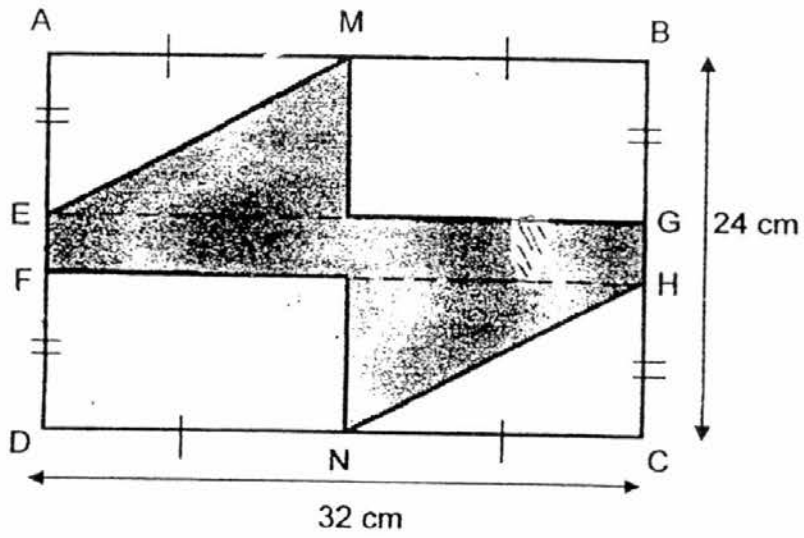
16. Mr Kang packs and sells mooncakes in big boxes of 8 and small boxes of 4. At first, there were twice as many small boxes of mooncakes as big boxes. After selling half the number of small boxes and some big boxes, Mr Kang packs another 6 small boxes of mooncakes.

(a) In the end, the number of mooncakes in the unsold small boxes is thrice the number of mooncakes in the unsold big boxes. Given that there are a total of 128 mooncakes in all the unsold boxes, find the number of mooncakes in the unsold small boxes.

(b) Find the number of big boxes Mr Kang packed at first.

Ans: (a) _____ [2]

(b) _____ [3]

Sub-Total :

17. There were some pears at a fruit stall. In the morning, $\frac{1}{6}$ of pears was sold. In the afternoon, another 30 pears were sold. The total number of pears sold was 5 less than $\frac{7}{12}$ of the number of pears the fruit stall had at first.

(a) How many pears were there at first?

(b) What fraction of the pears in the stall remained unsold in the afternoon?

Ans: (a) _____ [3]

(b) _____ [2]

Sub-Total :

18. At a game, Selena, Rihana and Tina had a total of 320 clips. Selena had the least number of clips. The ratio of Rihana's clips to Tina's clips was 5 : 4 at first. After Selena and Rihana had each lost $\frac{1}{2}$ of their clips, Rihana had 50 clips more than Selena. The girls had a total of 220 clips in the end.

(a) What is the ratio of the number of Rihana's clips to the number of Tina's clips at the end of the game?

(b) How many clips did Selena have at first?

Ans: (a) _____ [1]

(b) _____ [4]

End of Paper 2

EXAM PAPER 2016

SCHOOL   : ANGLO-CHINESE SCHOOL (JUNIOR)
SUBJECT   : MATHEMATICS
TERM   : SA2

PAPER 1
SECTION A

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
2	3	2	3	1	1	4	3	4	3

Q11	Q12	Q13	Q14	Q15
3	4	3	2	4

SECTION B

Q16. 283   Q17. 1.125   Q18. 7.01m   Q19. $3\frac{4}{15}$ Q20. 6   Q21. $24

Q22. $729cm^3$ Q23. Box C   Q24. 86°   Q25. 60   Q26. $72   Q27. $14

Q28(a) Cathy (b) 178kg   Q29. $98cm^2$ Q30. 3:2

PAPER 2

Q1.   576 children
Q2.   16 cupcakes
Q3.   0.7kg
Q4.   1.41m
Q5.   ¼ of square B
Q6.   Y = 325-265

         = 65

      2 of X = 190-60

            =130

      X = 130/2

       = 65   Answer: 65

Q7. $Left = \frac{3}{4} \times \frac{43}{50}$

$\quad = \frac{129}{200}$

$Left = 2480 \times \frac{129}{300}$

$\quad = 1599.60 \qquad$ Answer: \$1599.60

Q8. Water = 40 X 24 X 36 X 5/6

$\quad$ =2880

Capacity of tank Q = 24 X 20 X 18

$\qquad = 8640$

Water left = 28800 − 8640

$\qquad = 20160 \qquad$ Answer: $20160cm^3$

Q9. Boys in 5B = 1 − 1/7

$\qquad = 6/7$

3/4A = 6/7B

6/8A = 6/7 B

Units of girls in A = 8u − 6u

$\qquad\qquad = 2u$

12 = 2u+1u

$\quad = 3u$

7u = 12 X 7/3

$\quad = 28 \quad$ Answer: 28 pupils

Q10(a) Diff = 0.3L + 0.6L

$\qquad = 0.9L \quad$ Answer: The large bottle held 0.9L of drink more than the small bottle.

(b) 3L +7S = 10.5

10S = 10.5 − (0.9 X 3)

= 7.8

1S = 7.8 ÷ 10

= 0.78   Answer: A small bottle held 0.78L of drink.

Q11(a) 9u + 14 + 7 = 165

9u = 165 − 21

= 144

1u = 114÷ 9

= 16

4u = 16 X 4

=64   Answer: $64
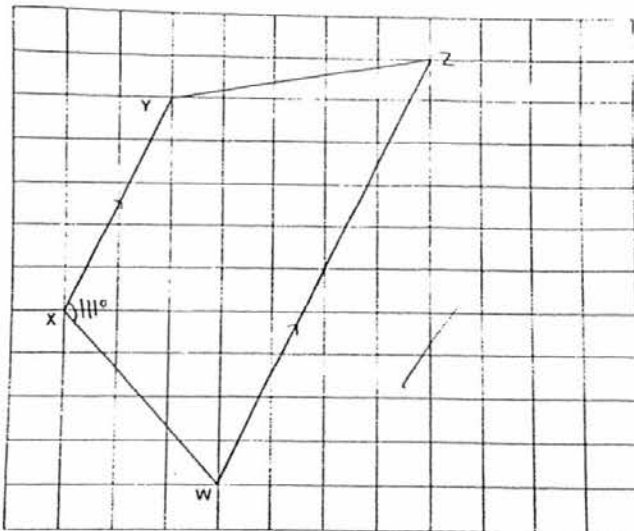
(b) Amount Hannah had at first = 64 + 14

= 78   Answer : $78

Q12(a) 111°

(b)

Q13(a) Kiwi = 520/100 X 30

        = 156   Answer: 156 Kiwi Fruit Tarts

(b) <u>At first</u>   <u>End</u>

   <u>K : B</u>   <u>K : B</u>

   3 : 7   6 : 5

   6 : 14

   14u = 9u

   6u = 156

   9u = 156/6 X 9

      = 234   Answer: 234 Blueberry Tarts

Q14(a) $6 = (1-2/3 X 1/4)

     = 1/12

$8 = 1 -2/3 -1/12

    = ¼   Answer: ¼ of the people

(b) <u>Number   Value   Total value</u>

   8u   X 4   =   32u

   1u   X 6   =   6u

   3u   X 8   =   24u

   ¼ = 3/12

   496 = 32u + 6u + 24u

     = 62u

   12u = 496/62 X 12

     = 96   Answer: 96 people

Q15. Area A = Area B

     Area A + Area B = $((24-4) \div 2)$ X $(32 \div 2)$ X2

                       = 320

     Area C + Area D = $((24-4) \div 2$ X $(32 \div 2)$ X $2 \div 2$

                       = 160

    Shaded area = 24 X 32 − 160 − 320

               = 288   Answer: $288 cm^2$

16(a) At first   End

    B : S   B : S

    1u:2u   1/3u + 2

    $128 \div 4 \div 1/3u + 2 + 1u + 6 = 1\frac{1}{3}u + 8$

    $1u = (128 \div 4 − 8) \div 1\frac{1}{3}$

    Mooncakes in unsold small boxes = (18 X 1 +6) X 4

                       = 96   Answer: 96 mooncakes

   (b) 1u = 18   Answer: 18 big boxes

Q17(a) 7/12u − 5 + 1/6u + 30

    7/12u − 1/6u = 5+30

    5/12u = 35

    1u = 35/5 X 12

       = 84   Answer: 84 pears

(b) Left = (84 X 5/6) – 30

   = 40

Left(fraction) = 40/84

   = 10/21   Answer: 10/21

Q18(a) At first   End

   R : T   R : T

   5 : 4   2.5: 4

   10: 6   5: 8   Answer: 5:8

(b) 320 – 220 = 100

2u = 100 – 50

   = 50

Selena at the end = 50 ÷ 2

   = 25

Selena at first = 25 X 2

   = 50   Answer: 50 clips