



Anglo-Chinese School (Primary)

MID-YEAR EXAMINATION 2010
MATHEMATICS
PAPER 1 (BOOKLET A)
PRIMARY SIX

Name: _____

Class: Primary 6 ____

Date: 12 May 2010

Duration of Booklet A & B: 50min

INSTRUCTIONS TO CANDIDATES

1. This question paper consists of 9 printed pages.
2. Do not turn this page until you are told to do so.
3. Follow all instructions carefully.
4. Shade your answer on the Optical Answer Sheet (OAS) provided.
5. You are not allowed to use a calculator.

Questions 1 to 10 carry 1 mark each. Question 11 to 15 carry 2 marks each.
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. 6 hundreds, 7 tenths and 8 thousandths is _____.
- 1) 670.008
 - 2) 600.870
 - 3) 600.708
 - 4) 600.078
2. A pencil costs x cents and a ruler costs 30 cents more. Tony wants to buy 3 pencils and 2 rulers but he is short of 20 cents. How much money does Tony have?
- 1) $(3x + 40)$ cents
 - 2) $(3x + 80)$ cents
 - 3) $(5x + 40)$ cents
 - 4) $(5x + 80)$ cents
3. Express 155 minutes in hours and minutes.
- 1) 1 h 55 min
 - 2) 2 h 35 min
 - 3) 2 h 45 min
 - 4) 2 h 55 min

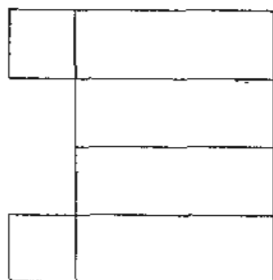
4. A jet plane will cover a distance of 125 km when it flew for $\frac{1}{5}$ h.

Find the average speed of the jet plane.

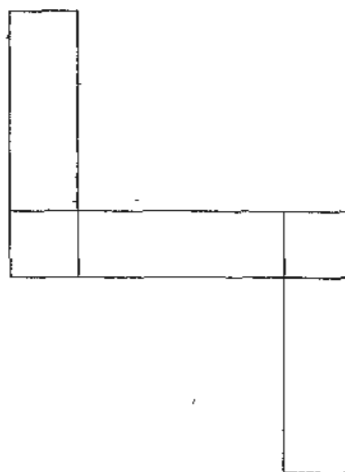
- 1) 25 km/h
 - 2) 125 km/h
 - 3) 625 km/h
 - 4) 25 000 km/h
5. Which of the following is the smallest number that can be divided by 5 with no remainder?
- 1) 3 054
 - 2) 3 504
 - 3) 4 035
 - 4) 5 340

6. Which of the following can be folded to form a cuboid?

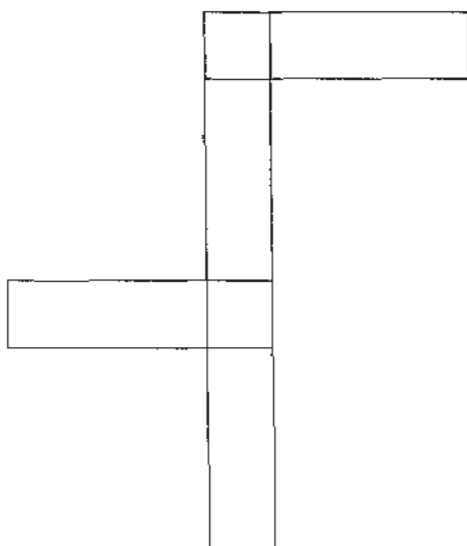
1)



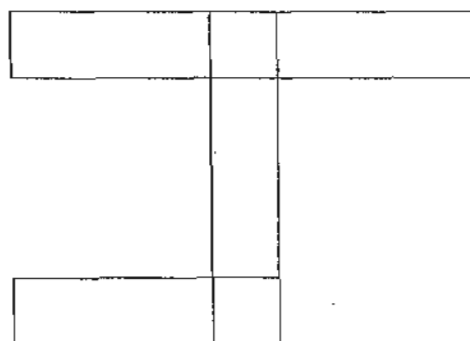
2)



3)



4)



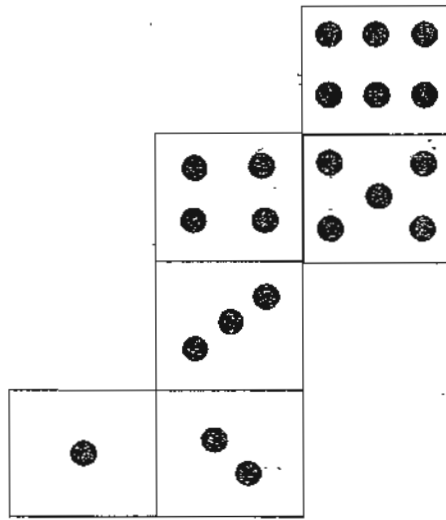
7. A cuboid has a square base of area 81 cm^2 . If the volume of the cuboid is 648 cm^3 , what is its height?

- 1) 8 cm
- 2) 9 cm
- 3) 18 cm
- 4) 72 cm

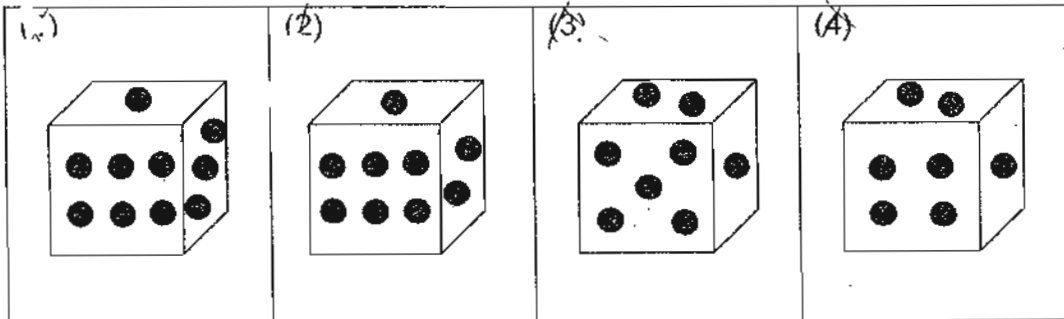
8. In a shop, $\frac{5}{9}$ of the flowers are roses and the rest are lilies. $\frac{2}{5}$ of the roses are red and there are a total of 28 red roses. How many flowers are there in the shop?

- 1) 14
- 2) 56
- 3) 70
- 4) 126

9. The figure below shows the net of a cube.



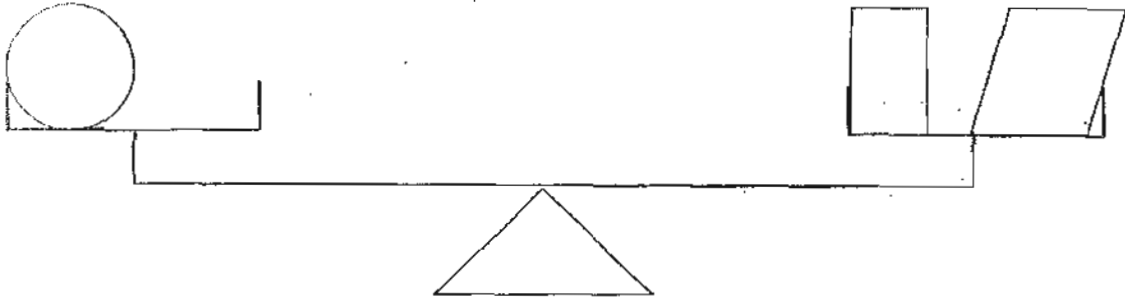
Which one of the following cubes is most likely to be formed from this net?



10. Dolly spent 4 days making key chains for her friends. Each day, she managed to make 2 key chains more than the day before. She made a total of 36 key chains. How many key chains did she make on the last day?

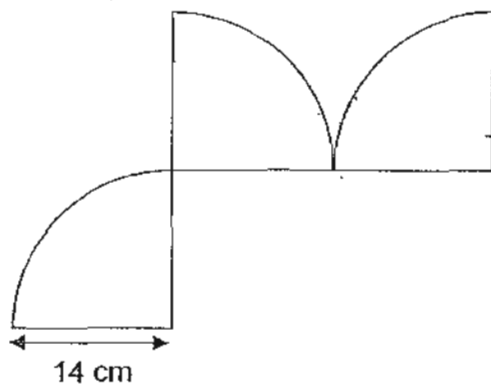
- 1) 9
- 2) 12
- 3) 18
- 4) 24

11. Three objects are placed on a balance as shown in the diagram below. If the ball weighs 3 kg, find the average mass of the three objects.



- 1) 2 kg
 - 2) 3 kg
 - 3) 6 kg
 - 4) 9 kg
12. Two machines were used to produce 2500 computer chips daily. Every minute, Machine A produced 80 more computer chips than Machine B. Machine A broke down after the two machines had produced 1400 computer chips altogether in 5 minutes. How much time was required to produce the remaining computer chips using Machine B alone?
- 1) 11 minutes
 - 2) 12.5 minutes
 - 3) 14 minutes
 - 4) 25 minutes

13. The figure below is made of 3 identical quadrants. Find its perimeter.
(Take $\pi = \frac{22}{7}$)



- 1) 66 cm
2) 117 cm
3) 136 cm
4) 150 cm
14. Simon spent \$20 of his allowance and saved the rest. If he increased his savings by 15%, his expenditure decreased by 30%.
How much is his allowance?
- 1) \$35
2) \$40
3) \$60
4) \$65

15. Sheila and Zachary shared a sum of money in the ratio of 5 : 7. After receiving \$20 each from their mother, the ratio of the amount of Sheila's money to the amount of Zachary's money becomes 3 : 4. Find the amount of money Zachary had at first.

- 1) \$ 40
- 2) \$ 70
- 3) \$ 100
- 4) \$ 140

148



Anglo-Chinese School (Primary)

MID-YEAR EXAMINATION 2010
MATHEMATICS
PAPER 1 (BOOKLET B)
PRIMARY SIX

Name: _____ () Class: Primary 6 _____

Date: 12 May 2010

Duration of Paper Booklet A & B: 50 min

Parent's/Guardian's signature

INSTRUCTIONS TO CANDIDATES

1. This question paper consists of 10 printed pages.
2. Do not turn this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. You are not allowed to use a calculator.

Section	Maximum Marks	Marks Obtained
Paper 1 Booklet A. Multiple-Choice Questions	20	
Paper 1 Booklet B. Short Answers: Part 1	10	
Paper 1 Booklet B. Short Answers: Part 2	10	
Total Marks	40	

Questions 16 to 25 carry 1 mark each. Write your answers in the spaces provided. Give your answers to the units stated and to its simplest form whenever necessary. (10 marks)

16. Express \$1.70 as a fraction of \$11.90.

Answer: _____

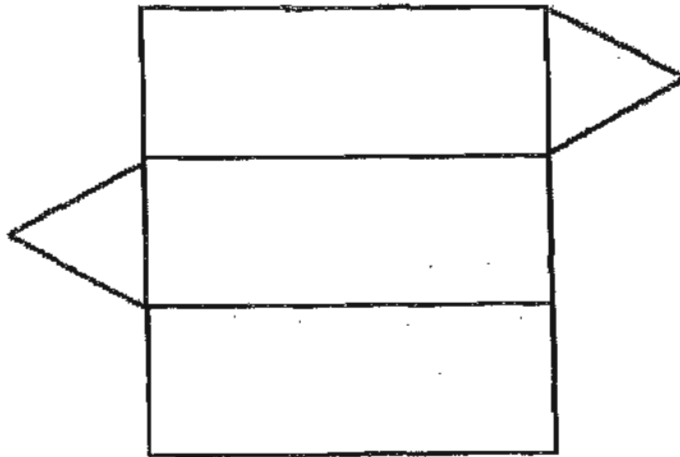
17. In a school bookshop, erasers are sold in packets of 3 for \$1.99. How much would it cost to buy 18 such erasers?

Answer: \$ _____

18. Susie is 4 times heavier than her baby brother. If her baby brother weighs 6.35 kg, what is their total weight?

Answer: _____ kg

19. The figure below shows the net of a solid. What is the solid that will be formed from this net?



Answer:

20. In Primary 6B, Daniel is the 18th pupil from the top and bottom of the class list. How many pupils are there in Primary 6B?

Answer: _____

21. At a concert, the ratio of the number of adults to the number of children was 5 : 9. The ratio of the number of men to the number of women was 2 : 3. What was the ratio of the number of children to the number of women?

Answer: _____

22. For every litre of orange juice, Jane uses $\frac{3}{5}$ cup of sugar. How many cups of sugar will she use to make 45 litres of orange juice?

Answer: _____

23. Find the maximum number of 3-cm cubes that can be placed in a cuboid measuring 26 cm by 17 cm by 20 cm.

Answer: _____

24. Mr Raj is travelling at an average speed of 78 km/h. How far does he travel in $1\frac{1}{3}$ h?

Answer: _____ km

25. The table below shows the number of curry puffs sold at a bakery last weekend.

Day	Number of curry puffs sold
Saturday	$5n - 4$
Sunday	$6n + 5$

What was the total number of curry puffs sold last weekend?

Express your answer in terms of n in the simplest form.

Answer: _____

Questions 26 to 30 carry 2 marks each. Show all mathematical statements clearly in the space below each question and write your answers in the spaces provided. Give your answers to the units stated and to its simplest form whenever necessary. (10 marks)

26. John, Peter and Ali had the same number of marbles at first. After Peter and Ali had each given $\frac{1}{3}$ of their marbles to John, John had 35 marbles in the end. How many marbles did the three boys have altogether?

Answer: _____

27. The area of a rectangle is 80 cm^2 . Its breadth is $\frac{4}{5}$ of its length. What is the perimeter of the rectangle?

Answer: _____ cm

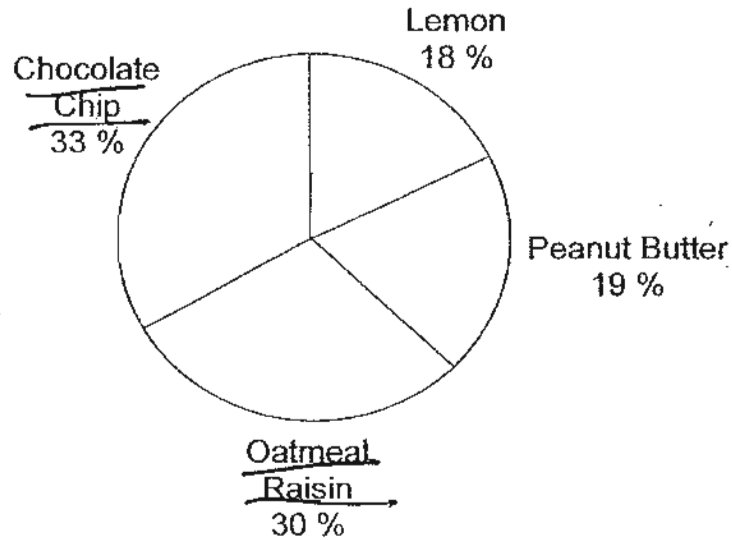
28. Wilson had 65 more red marbles than blue marbles. After giving away 30 marbles of each type, his collection of blue marbles becomes 50% of his collection of red marbles. Find the total number of marbles Wilson has left.

Answer: _____

29. The pie chart shows the amount of money collected from the sale of cookies at the Cookie Shop. A total of \$12 600 was collected from the sale of Oatmeal Raisin cookies and Chocolate Chip cookies.

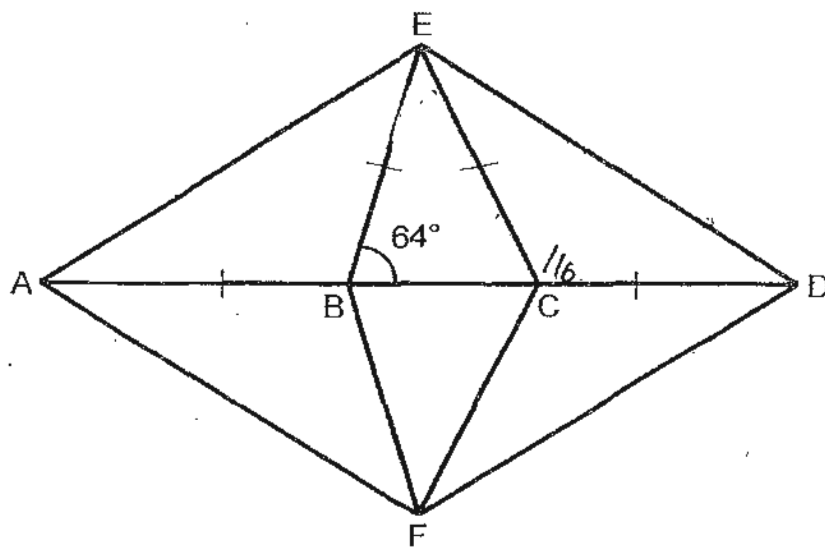
How much money was collected from the sale of Peanut Butter cookies?

Amount of money collected from the sale



Answer : _____

30. Study the diagram shown below. AEDF is a rhombus. $AB = BE$, $CD = CE$. Find $\angle AED$.



Answer: _____°



Anglo-Chinese School (Primary)

MID-YEAR EXAMINATION 2010
MATHEMATICS
PAPER 2
PRIMARY SIX

Name: _____ ()

Class: Primary 6 _____

Date: 12 May 2010

Duration of Paper 2: 1h 40min

Parent's/Guardian's signature

INSTRUCTIONS TO CANDIDATES

1. This question paper consists of 16 printed pages.
2. Do not turn this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. You are allowed to use a calculator.

Section	Maximum Marks	Marks Obtained
Paper 2 Section B. Short Answers: Part 2	10	
Paper 2 Section C. Problem Sums	50	
Total Marks	60	40

Questions 1 to 5 carry 2 marks each. Show your mathematical statements clearly in the space provided for each question and write your answers in the spaces provided. Give your answers to the units stated and to its simplest form whenever necessary. (10 marks)

1. Mrs Lee paid \$1337.50 for a washing machine and a coffee table, including 7% GST. If the washing machine cost \$725 before GST, what is the cost of the coffee table before GST?

Answer: _____

2. A rectangular tank has a base area of 11.4 m^2 . If its height is 4 m, find the volume of water in the tank when it is $\frac{1}{3}$ full.

Answer: _____

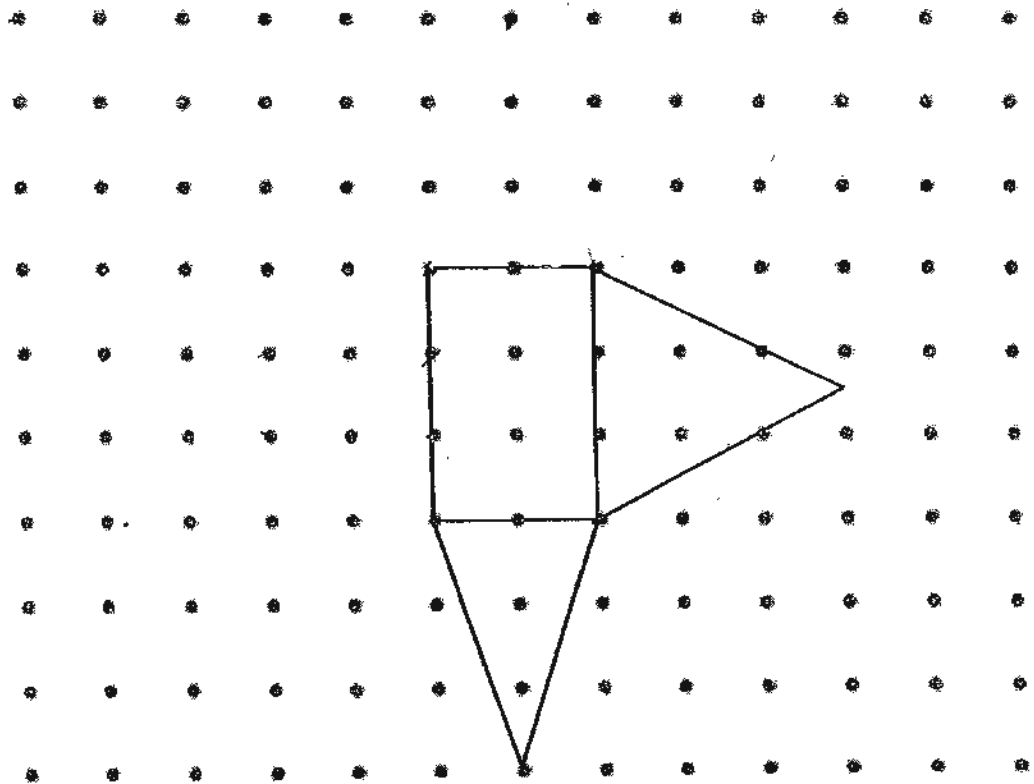
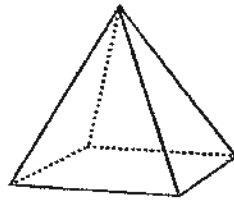
3. The table shows the charges for renting a car. Mr Tan rented a luxury car at 8.40 a.m. He returned it at 12.05 p.m. on the same day.

Duration	Charges
1 st hour or part thereof	\$60
Subsequent half hour or part thereof	\$15

How much did he pay for renting the car?

164

4. The figure below shows a pyramid consisting of four isosceles triangular faces and a rectangular base. Complete the net of this pyramid within the grid provided below.



5. The table below shows the amount of Candice's monthly savings from January to April.

Month	January	February	March	April
Amount of savings (\$)	34	40	46	50

If Candice uses some of her savings to buy a handbag, her average monthly savings will decrease to \$35. How much does the handbag cost?

Answer: \$ _____

166

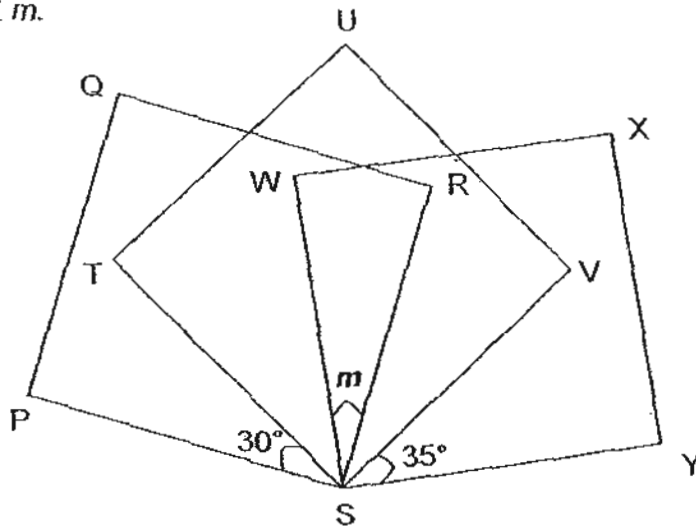
For questions 6 to 18, show your steps clearly in the space provided for each question and write your answers in the spaces provided.
 For questions which require units, give your answers in the units stated.
 The number of marks available is shown in brackets [] at the end of each question or part-question. (50 marks)

6. At first, Matthew has twice as many soccer cards as Ivan. Each of them then bought the same number of cards. As a result, both of them now have 160 cards in total. If Matthew now has 30 more cards than Ivan, find the number of cards each of them bought.

Answer: _____ [3]

7. In the figure below, not drawn to scale, PQRS, STUV and SWXY are three identical squares. $\angle PST = 30^\circ$ and $\angle VSY = 35^\circ$.

Find $\angle m$.

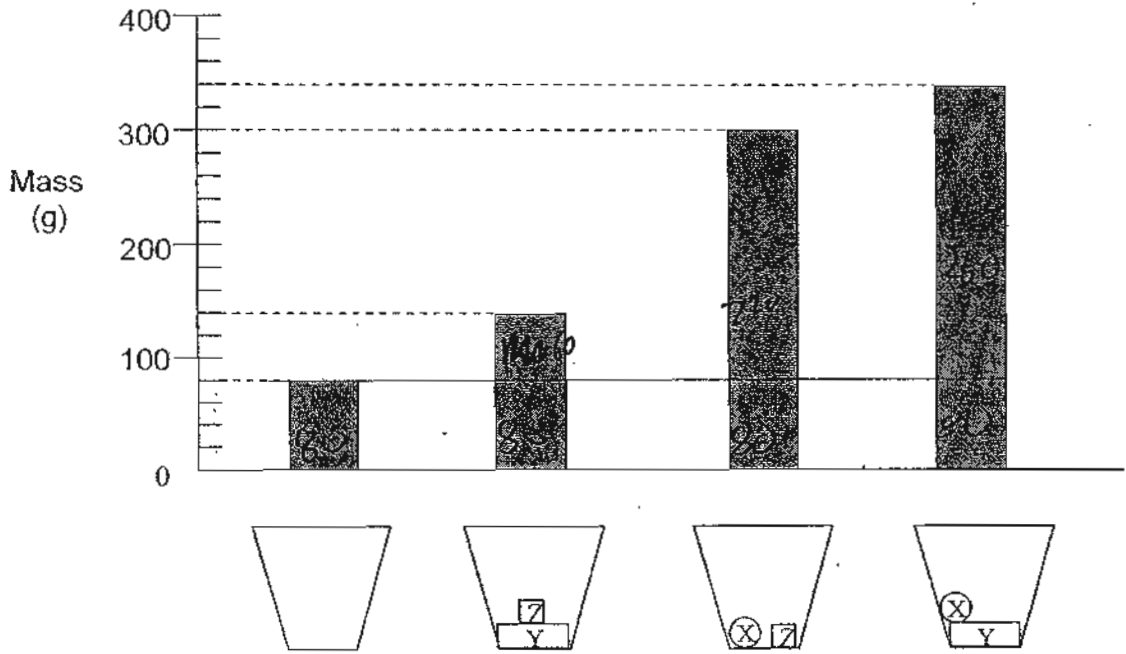


Answer : _____ [3]

8. A tank measuring 50 cm by 20 cm by 60 cm is filled with water to its brim. All the water in the tank is then transferred into cups with a capacity of 200 cm^3 each. How many cups are required to hold the water?

Answer: _____ [3]

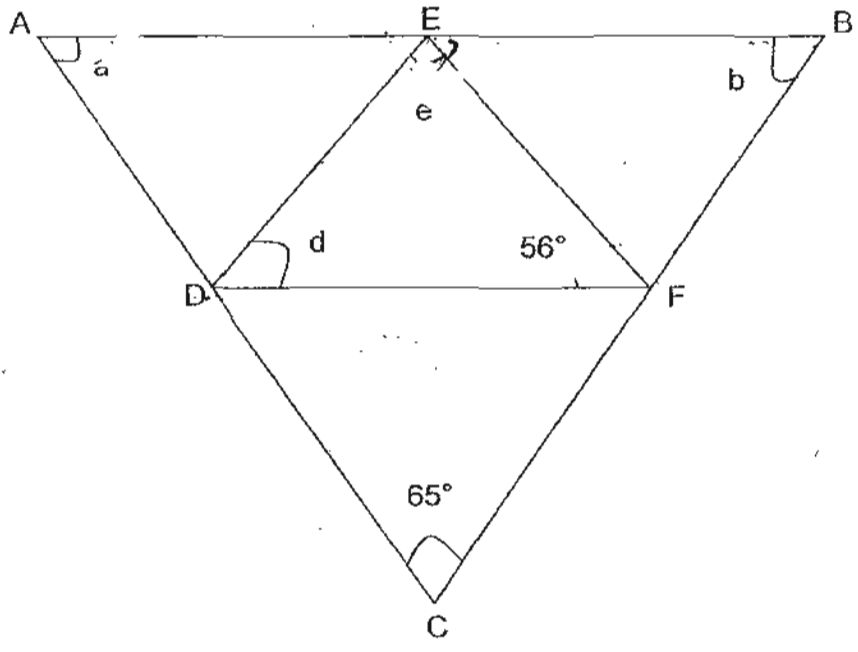
9. The graph below shows the mass of a container when it is empty and when different combinations of objects X, Y and Z are placed in it.



What is the average mass of the objects X, Y and Z?

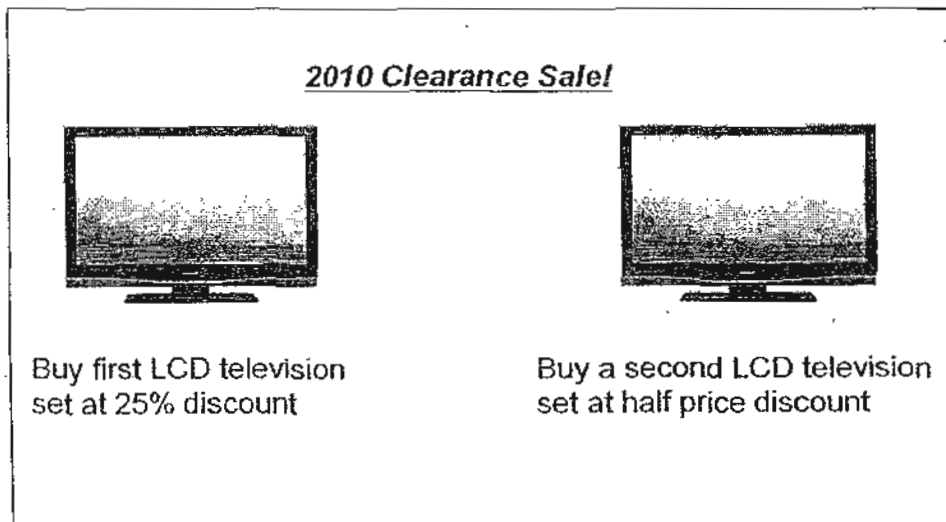
Answer: _____ [3]

10. In the figure below, not drawn to scale, ABC and DEF are triangles, Find $\angle a + \angle b + \angle d + \angle e$.



Answer: _____ [3]

11. Ashley paid \$1 200 for two LCD television sets during a clearance sale as shown in the diagram below. If he had not bought them during the sale, how much more money would he have had to pay for the two television sets?



Answer: _____ [3]

12. Weiming had $\frac{2}{3}$ as many stickers as Shiyang. After Weiming gave 52 stickers to Shiyang, Weiming had $\frac{2}{5}$ as many stickers as Shiyang. How many stickers did Weiming have at first?

Answer: _____ [4]

13. Salleh weighs p kg. Vivek is three times as heavy as Salleh. Josiah is 8 kg lighter than Vivek.
- (a) What is the total mass of the three boys in terms of p ?
- (b) If Salleh weighs 20 kg, what is the difference between Josiah's mass and Salleh's mass?

Answer : a) _____ [2]

b) _____ [2]

14. Tony and Charles took part in a car race. Tony drove at a speed of 90km/h. Both of them did not change their speed throughout the race. When Charles had covered $\frac{1}{3}$ the distance, Tony was 15 km in front of him. Tony reached the finishing line at 9.35 a.m. At what time did Charles reach the finishing line?

Answer: _____ [4]

15. Both Joanne and Joseph had an equal amount of money at first. Every month, Joanne spent \$850 and Joseph spent \$912. After a few months, Joanne was left with \$1 550 while Joseph had $\frac{4}{5}$ as much as Joanne. How much money did Joseph have at first?

Answer:

[5]

74

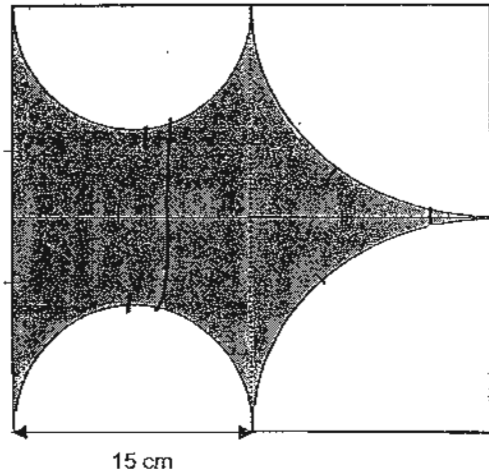
16. Mr Wu had some badges and decided to give them to his two sons, Sean and Matthew. Mr Wu gave $\frac{1}{3}$ of the badges and 8 more badges to Sean. He then gave $\frac{3}{4}$ of the remainder to Matthew but took back 2 badges. Mr Wu was left with 26 badges. How many badges did Mr Wu have at first?

Answer: _____ [5]

17. The shaded figure below is formed by semicircles, quarter circles and straight lines of 15 cm each.

For each of the following, use the calculator value of π to find

- (a) the perimeter of the shaded figure, correct to 2 decimal places,
(b) the area of the shaded figure, correct to 2 decimal places.



Answer: (a) _____ [2]

(b) _____ [3]

18. Keane bought some marbles and gave half of them to Leon. Leon bought some stamps and gave half of them to Keane.

Keane used 5 stamps and Leon gave away 11 marbles. The ratio of the number of stamps to the number of marbles Keane had left then became 1 : 7 and ratio of the number of stamps to the number of marbles Leon had left became 1: 5.

How many stamps did Leon buy?

Answer: _____ [5]

End of Paper 2

ANSWER SHEET

EXAM PAPER 2010

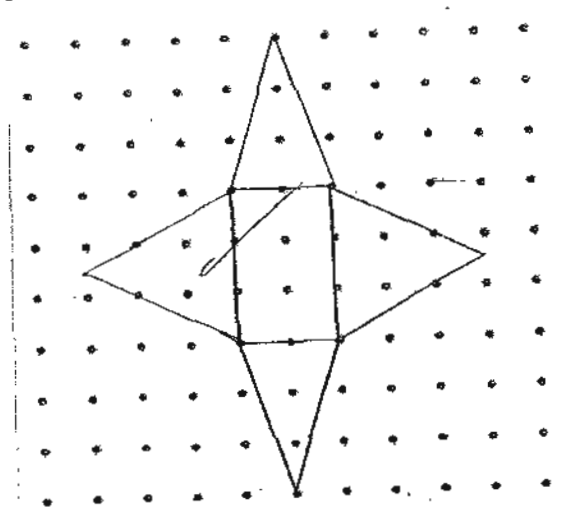
SCHOOL : ACS PRIMARY
SUBJECT : PRIMARY 6 MATHEMATICS

TERM : SA1

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

- | | | | | |
|---------|-------------|------------|------------|-----------|
| 16) 1/7 | 17) \$11.94 | 18) 38.1kg | 19) prism | 20) 35 |
| 21) 3:1 | 22) 27 | 23) 240 | 24) 104km | 25) 11n+1 |
| 26) 63 | 27) 36cm | 28) 195 | 29) \$3800 | 30) 116° |

Paper 2

<p>1) $725 \times 107\% = 775.75$ $1337.50 - 775.75 = 561.75$ $561.75 \div 107 = 5.25$ $5.25 \times 100 = \\$525$</p>	<p>2) Base area : $11.4m^2 = 129.96$ $1/3 \text{ full} \rightarrow 4 \div 3 = 4/3$ Volume of water $\rightarrow 4/3 \times 11.4$ $= 15.2m^2$</p>
<p>3) $60 + 30 + 30 + 15 = \\$135$</p>	<p>4)</p> 

<p>5) $34+40+46+50=170$ $170 \div 4=42.5$ $35 \times 4=140$ $170 - 140 = \\$30$</p>	<p>6) $30 \times 3=90$ $160 - 90 =70$ $70 \div 2 = 35$</p>
<p>7) $90^\circ - 35^\circ = 55^\circ$ $90^\circ - 55^\circ = 35^\circ$ $90^\circ - 30^\circ - 35^\circ = 25^\circ$</p>	<p>8) $50 \times 20 \times 60 =60000$ $60000 \div 200 = 300$</p>
<p>9) container $\rightarrow 80g$ Container $+2+y \rightarrow 140g$ $140 - 80 =60$ $Z+y=60g$ $C+x+2 \rightarrow 300$ $300 - 80=220$ $X+z=220$ $X+y \rightarrow 340 - 80=260$ $60+220+260=540$ $540 \div 6=90g$</p>	<p>10) $A+B \rightarrow 180^\circ$ $E+D \rightarrow 180^\circ - 56^\circ =124^\circ$ Total $\rightarrow 115^\circ +124^\circ =239^\circ$</p>
<p>11) $1\frac{1}{4} x \rightarrow 1200$ $5/4 \rightarrow 1200$ $\frac{1}{4} x \rightarrow 1200 \div 5=240$ $X \rightarrow 240 \times 4=960$ $2x \rightarrow 960 \times 2=1920$ $1920 - 1200=\\$720$</p>	<p>12) $10u - 260 \rightarrow 6u +104$ $10u - 6u =4u$ $260 +104=364$ $4u \rightarrow 364$ $1u \rightarrow 364 \div 4=91$ $2u \rightarrow 91 \times 2=182$</p>
<p>13) a) $S \rightarrow P \text{ kg}$ $V \rightarrow 3p \text{ kg}$ $J \rightarrow 3p \text{ kg} - 8\text{kg}$ Total $\rightarrow P+3p+3p - 8 = (7p - 8)\text{kg}.$ b) $20 \times 3=60$ $60 - 8=52$ $52 - 20=32\text{kg}$</p>	<p>14) 10.05 a.m.</p>
<p>15) $1u - x \ 850 \rightarrow 1550$ $1u - x \ 912 \rightarrow 1240$ $1550 - 1240=310$ $1u - 850 \ x \rightarrow 1550$ $1u - 912 \ x \rightarrow 1240$ $310 \div 62=5$ $(5 \times 912)+1240=\\$5800$</p>	<p>16) $26 - 2 = 24$ $24 \times 4 = 96$ $96 + 8 =104$ $104 \div 2 = 52$ $52 \times 3 = 156$</p>
<p>17) a) 124.25cm b) 369.86cm²</p>	<p>18) 46 stamps</p>