



Rosyth School
First Continual Assessment 2013
Primary 6 Mathematics

Name: _____ Register No. _____

Class: Pr 6 - _____

Date: 1 March 2013 Parent's Signature: _____

Total Time for Booklets A and B : 50 minutes

PAPER 1
(Booklet A)

Instructions to Pupils:

1. Do not open this booklet until you are told to do so.
2. Follow all instructions carefully.
3. Shade your answers in the Optical Answer Sheet (OAS) provided.
4. You are not allowed to use a calculator
5. Answer all questions.

Section	Maximum Mark	Marks Obtained
Paper 1 (Booklet A)	20	

*** This booklet consists of 7 pages (including this cover page)**

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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. Last year, the number of tourists who visited the zoo was 278 600 when rounded off to the nearest hundred. Which of the following is most likely the actual number of tourists?
- (1) 278 549
 - (2) 278 649
 - (3) 278 659
 - (4) 278 709
2. A bag costs \$120 before GST. What is the cost of the bag inclusive of 7% GST?
- (1) \$111.60
 - (2) \$128.40
 - (3) \$140.40
 - (4) \$204.00
3. Simply $5e + 2 - 2e + 9 - e$.
- (1) $3e - 11$
 - (2) $8e + 7$
 - (3) $7 - 8e$
 - (4) $11 + 2e$
4. Find the value of $\frac{3m+6}{2}$ when $m = 2$.
- (1) $5\frac{1}{2}$
 - (2) 6
 - (3) 9
 - (4) 12

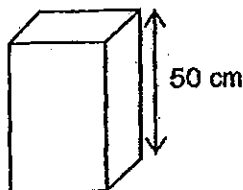
5. A yellow ribbon is k cm long. A blue ribbon is twice as long as the yellow ribbon. What is the total length of the yellow and blue ribbons?

- (1) k cm
- (2) $2k$ cm
- (3) $3k$ cm
- (4) $4k$ cm

6. The number of oranges is $\frac{3}{5}$ of the number of apples. What is the ratio of the number of apples to the total number of oranges and apples?

- (1) 2 : 3
- (2) 3 : 2
- (3) 2 : 5
- (4) 5 : 8

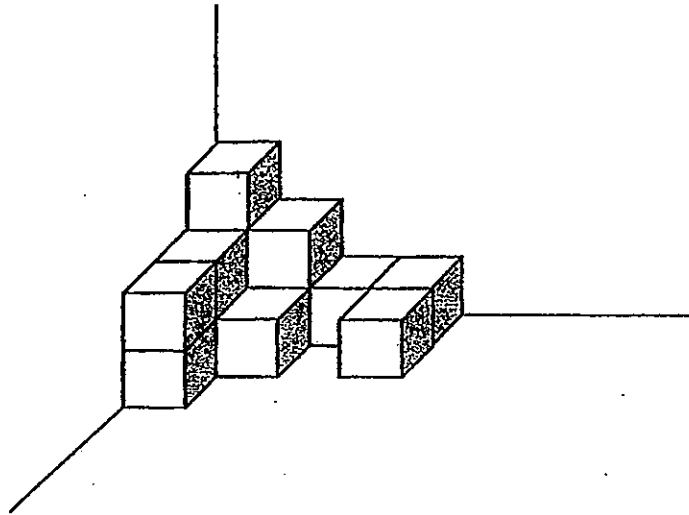
7. The box shown below is fully packed with 1-cm cubes. There are 400 cubes in it altogether.



What is the smallest possible base area of the box?

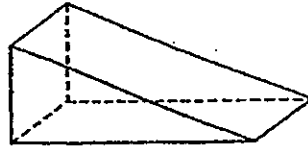
- (1) 8
- (2) 2
- (3) 9
- (4) 4

8. Siva stacked some 1-cm cubes as shown in the diagram below.
How many more cubes would he need to make a 4 cm by 4 cm by 4 cm solid?



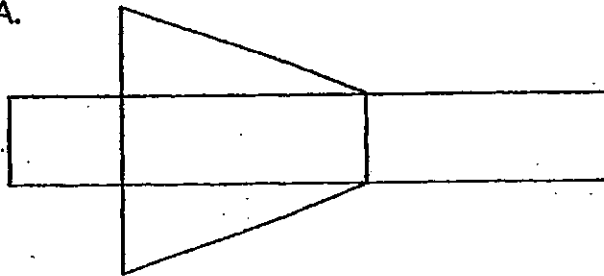
- (1) 13
(2) 23
(3) 35
(4) 51
9. Tim and Ann had a total of 420 marbles. Tim had $\frac{2}{5}$ of what Ann had. How many more marbles did Ann have than Tim?
- (1) 60
(2) 120
(3) 180
(4) 300

10. Study the prism shown below.

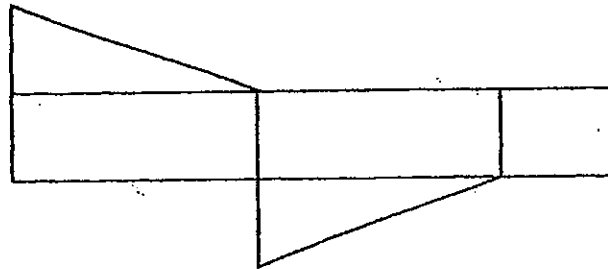


Which of the following are nets of the prism?

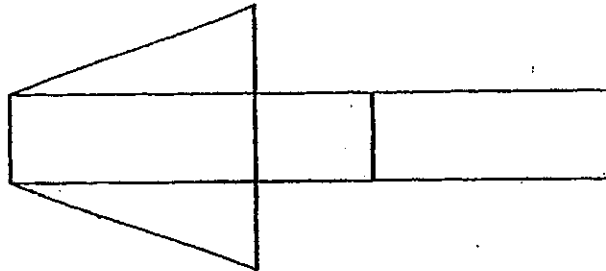
A.



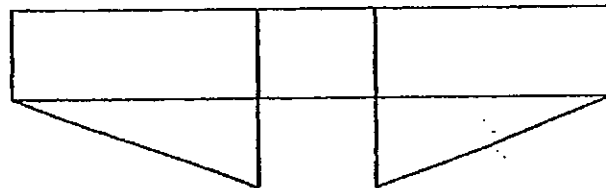
B.



C.



D.



- (1) A and B only
- (2) A and C only
- (3) B and C only
- (4) B and D only

11. Carrie is thrice as old as her daughter's age now. Her daughter will be 21 years old in 8 years' time. What is their total age now?
- (1) 13
(2) 39
(3) 52
(4) 76
12. Margaret has some green, blue and red beads. $\frac{3}{4}$ of the beads are green while $\frac{3}{5}$ of the remaining beads are blue. What fraction of the beads is red?
- (1) $\frac{1}{10}$
(2) $\frac{3}{20}$
(3) $\frac{3}{10}$
(4) $\frac{2}{5}$
13. The ratio of the mass of Ken to the mass of Jane is 5 : 3. The ratio of the mass of Jane to the mass of Rani is 4 : 5. If Rani weighs 60 kg, what is the mass of Ken?
- (1) 12 kg
(2) 36 kg
(3) 48 kg
(4) 80 kg

14. Alice, Ben and Connie shared \$640. Ben received 40% more than Alice. Connie received 20% less than Alice. How much more did Ben receive than Connie?

- (1) \$40
- (2) \$120
- (3) \$128
- (4) \$440

15. Ramu, Kaijie and Liling shared some money. The total amount of money Ramu and Kaijie received was \$28. The total amount of money Ramu and Liling received was \$60. Liling's amount of money was thrice as much as Ramu's amount of money. What was the total amount of money the three children share?

- (1) \$13
- (2) \$32
- (3) \$64
- (4) \$73

(Go on to Booklet B)



Rosyth School
First Continual Assessment 2013
Primary 6 mathematics

Name: _____ Register No. _____

Class: Pr 6 - _____

Date: 1 March 2013

Parent's Signature: _____

Total Time for Booklets A and B : 50 minutes

PAPER 1
(Booklet B)

Instructions to Pupils:

1. Do not open this booklet until you are told to do so.
2. Follow all instructions carefully.
3. You are **not** allowed to use a calculator
4. Answer all questions.

Section	Maximum Mark	Marks Obtained
Paper 1 (Booklet B)	20	

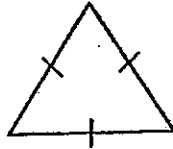
*** This booklet consists of 8 pages (including this cover page)**

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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)

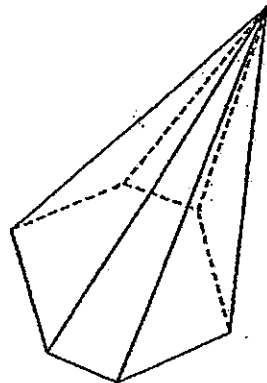
16. Below shows an equilateral triangle.



What fraction of its perimeter is the length of its one side?

Ans: _____

17. How many triangular faces are there in the solid figure shown below?



Ans: _____

18. What is the missing value in the box?

$$176 - 65 \div 5 - 3 \times 9 = \boxed{?}$$

Ans: _____

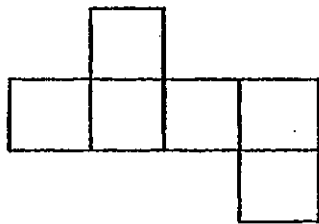
19. Evaluate the following expression given that $x = 3$.

Ans: _____

20. A wholesaler receives a shipment of 96 000 mobile phone covers. He has to repack them into boxes with 600 covers in each box. How many boxes does he need to have?

Ans: _____

21. The diagram below shows the net of a cube with a perimeter of 98 cm. What is the volume of the cube?



Ans: _____ cm^3

22. Mark's height is $\frac{3}{4}$ of Rachel's height. Gina's height is half the height of Mark. What is the ratio of Rachel's height to Gina's height to Mark's height?

Ans: _____

23. Ben bought m pens at 40 cents each. He gave the cashier \$50. What is the amount of change he received from the cashier? Express the answer in terms of m .

Ans: _____ ¢

24. The length and breadth of a rectangle are $4w$ cm and 5 cm respectively. Its area is 180 cm^2 . Find the value of w .

Ans: _____

25. An Art lesson lasts $\frac{2}{3}$ hour. An Art trainer teaches from 0800 to 1300 with an hour break daily. How many lessons does the Art trainer teach daily?

Ans: _____

Questions 26 to 30 carry 2 marks each. Show your workings 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.

(10 marks)

-
26. The ratio of the perimeter of a triangle to the perimeter of a square is 5 : 6. The perimeter of the square is 8 cm longer than the perimeter of the triangle. Find the area of the square.

Ans: _____ cm²

27. In a garden, 30% of the flowers are lilies, 25% of them are orchids and the rest of them are hibiscus. If there are 90 more hibiscus than lilies, how many flowers are there altogether?

Ans: _____

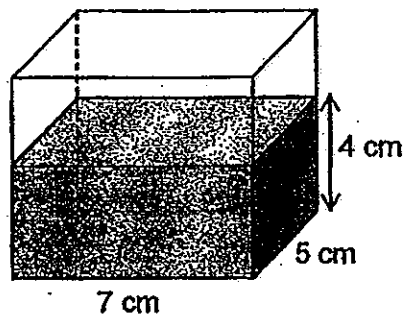
28. A ribbon which was $\frac{3}{4}$ m long was cut equally into a few pieces. Each piece was $\frac{1}{8}$ m long. How many cuts were made?

Ans: _____

29. A T-shirt cost 3 times as much as a pair of shorts. Ally spent \$96 on 2 T-shirts and 2 pairs of shorts. How much more did a T-shirt cost than a pair of shorts?

Ans: \$ _____

30. The tank below is $\frac{2}{3}$ filled with water. Minah wants to add some water to fill it to its brim. What volume of water will she need to add?



Ans: _____ cm³

End of Paper



Rosyth School
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Primary 6 Mathematics

Name: _____ Register No. _____

Class: Pr 6 - _____

Date: 1 March 2013 Parent's Signature: _____

Time: 1 h 40 min

PAPER 2

Instructions to Pupils:

1. Do not open this booklet until you are told to do so.
2. Follow all instructions carefully.
3. Show your workings clearly as marks are awarded for correct working.
4. Write your answers in this booklet.
5. You are allowed to use a calculator
6. Answer all questions.

Questions	Maximum Mark	Marks Obtained
Q 1 to 5	10	
Q 6 to 18	50	

Section	Maximum Mark	Marks Obtained
Paper 1	40	
Paper 2	60	
Total	100	

*** This booklet consists of 16 pages (including this cover page)**

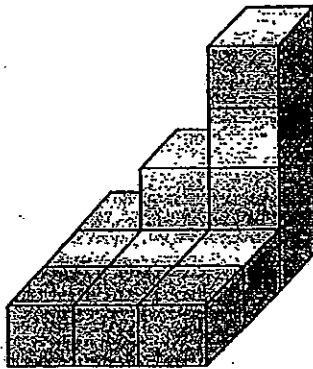
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Questions 1 to 5 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

Do not write
in this space

(10 marks)

1. The solid figure shown below is made up of 1-cm cubes. The whole solid including the base, is painted green. How many cubes have two of their faces painted green?



Ans: _____

2. The ratio of the number of books to the number of magazines is 9 : 5. After half of the magazines were given away, there were 92 books and magazines left. How many books and magazines were there at first?

Ans: _____

3. Mr Tan had 495 apples and pears at his fruit stall. $\frac{1}{4}$ of the apples was equal to $\frac{2}{3}$ of the pears. He packed all the apples into packets of 3. Each packet was sold at \$1. How much would Mr Tan receive after he sold all his apples?

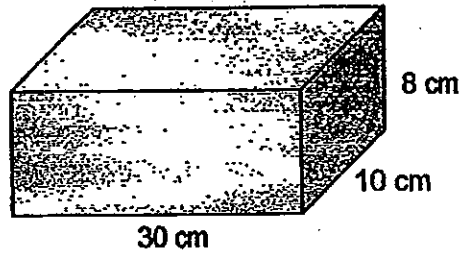
Do not write
in this space

Ans: \$ _____

-
4. 250 seats in a hall were filled. Twenty minutes later, 430 seats were filled. What was the percentage increase in the number of seats filled during the twenty-minute period?

Ans: _____ %

5. The container shown below measuring 30 cm by 10 cm by 8 cm was completely filled with water. The water was used to fill 3 kettles with each of them having a capacity of 250 cm^3 . What was the height of the water left in the container after all the kettles had been completely filled?



Do not write
in this space

Ans: _____ cm

Questions 6 to 18, show your working clearly in the space provided for each question 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)

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in this space

-
6. Gina had 56 more stamps than John. When John gave Gina 22 of his stamps, Gina had 5 times as many stamps as John. How many stamps did John have at first?

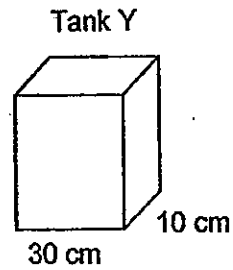
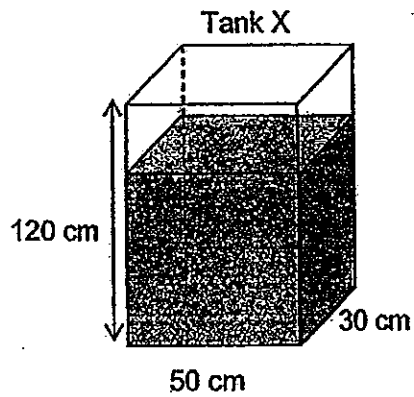
Ans: _____ [3m]

-
7. Mrs Lim baked some chocolate and strawberry cookies. The total of all the strawberry cookies and $\frac{3}{8}$ of the number of chocolate cookies was 430. The total of $\frac{1}{4}$ of the number of strawberry cookies and $\frac{1}{2}$ of the number of the chocolate cookies was 192. How many strawberry cookies did Mrs Lim bake?

Ans: _____ [3m]

8. Tank X measures 50 cm by 30 cm by 120 cm. It was $\frac{2}{3}$ filled with water. The water was then poured from Tank X to Tank Y until the height of the water level in Tank X became thrice as high as that in Tank Y. Find the volume of water in Tank Y. Express your answer in litres.

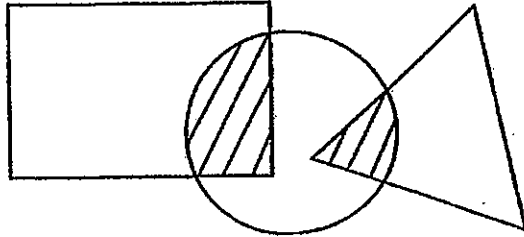
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Ans: _____ [3m]

9. The diagram below, not drawn to scale, is made up of a rectangle, a circle and a triangle. The ratio of the area of the rectangle to the area of the circle to the area of the triangle is $8 : 6 : 5$. If $\frac{1}{4}$ of the rectangle and $\frac{1}{5}$ of the triangle are shaded, what is the ratio of the shaded areas to all the unshaded areas?

Do not write
in this space



Ans: _____ [3m]

10. 3 years ago, the total age of Timothy and his brother was 12y years old. Timothy is y years old now.

(a) Find the age of Timothy's brother now.

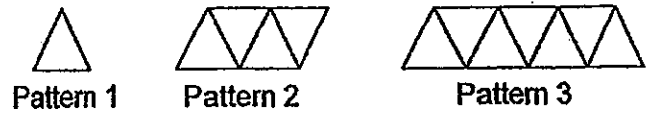
(b) Given that $y = 3$, find the age of Timothy's brother now.

Do not write
in this space

Ans: (a) _____ [2m]

(b) _____ [1m]

11. Study the pattern below and answer the following questions.



- (a) How many triangles are there in Pattern 5?
- (b) How many triangles are there in Pattern 20?
- (c) How many triangles are there in Pattern n ?

Do not write
in this space

Ans: (a) _____ [1m]
(b) _____ [2m]
(c) _____ [2m]

12. Alex and Muthu shared a box of erasers in the ratio 2 : 3. After Muthu gave $\frac{3}{4}$ of his share to Alex, Alex had 70 more marbles than Muthu.

(a) How many marbles did Muthu give to Alex?

(b) How many marbles did they have altogether?

Do not write
in this space

Ans: (a) _____ [2m]

(b) _____ [2m]

13. Mary had some beads. She used 60% of them to make 14 necklaces. She then used 25% of the remaining beads to make bracelets. She had 84 beads left.

Do not write
in this space

(a) How many beads did she have at first?

(b) How many beads did she use for each necklace?

Ans: (a) _____ [2m]

(b) _____ [2m]

14. Maggie had a collection of seashells, bookmarks and ribbons. She had 76 seashells. 20% of her collection were bookmarks. She had 44 fewer bookmarks than ribbons.

Do not write
in this space

- (a) What was the total number of seashells, bookmarks and ribbons?
- (b) Maggie was given some bookmarks and her total collection of seashells, bookmarks and ribbons increased by 25%. What percentage of her total collection were bookmarks after that?

Ans: (a) _____ [2m]

(b) _____ [2m]

15. Marilyn had some pairs of boots. She sold them at her shop at \$69.90 each. Customers who bought 2 pairs of the boots were given a discount of \$29.90 for the second pair. She collected \$2556.80 and sold 8 pairs at a discounted rate. How many customers bought only one pair of boots?

Do not write
in this space

Ans: _____ [4m]

16. Tap A could fill half of an empty tank in 2 minutes and Tap B could fill the same empty tank in 6 minutes. Peter wanted to fill the tank completely. In the first minute, only Tap A was turned on. In the second minute, both taps were turned on. How long would it take to fill the tank completely?

Do not write
in this space

Ans: _____ [4m]

17. Ken bought a dictionary, a reference book and a storybook. The cost of a dictionary and a reference book is \$85. The cost of a reference book and a storybook is \$64. The cost of the dictionary is 4 times as much as the cost of the storybook.

Do not write
in this space

(a) What is the cost of one storybook?

(b) If Ken gave the cashier a \$100 note, how much change did he receive?

Ans: (a) _____ [2m]

(b) _____ [3m]

18. School A had a fund-raising activity. $\frac{2}{3}$ of the money was raised by

Pri 6 classes and the rest was raised by Pri 3 classes. $\frac{5}{12}$ of the money

raised by the Pri 6 classes was raised by the boys and $\frac{1}{3}$ of the money raised by the Pri 3 classes was raised by the boys. All the girls raised a total of \$4950.

(a) How much money did all the pupils raise altogether?

(b) What is the difference between the sum of money raised by all the boys and all the girls?

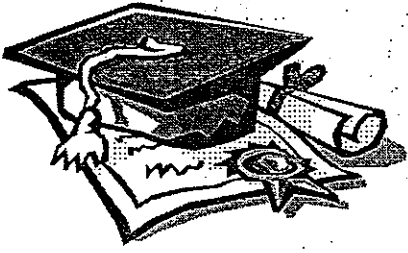
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Ans: (a) _____ [3m]

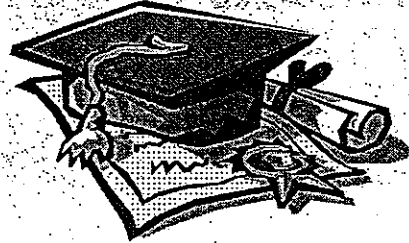
(b) _____ [2m]

End of Paper





ANSWER SHEET



EXAM PAPER 2013

SCHOOL : ROSYTH PRIMARY SCHOOL

LEVEL : PRIMARY 6

SUBJECT : MATHEMATICS

TERM : CA1

Booklet A

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

16. $\frac{1}{3}$

17. 6

18. 136

19. 10

20. 160

21. 343

22. 8:3:6

23. 5000-40m

24. 9

25. 6

26. 144

27. 600

28. 5

29. 24

30. 70

Paper 2

1. 2cubes

2. $18+5=23$

$92 \div 23=4$

$18+10=28$

$28 \times 4=112$

3. $\frac{1}{4} a = \frac{2}{3} p$

$\frac{2}{8} a = \frac{2}{3} p$

$$8+3=11$$

$$495 \div 11 = 45$$

$$45 \times 8 = 360$$

$$360 \div 3 = 120$$

4. $430 - 250 = 180$

$$180 / 250 \times 100\% = 72$$

5. $30 \times 10 \times 8 = 2400$

$$250 \times 3 = 750$$

$$2400 - 750 = 1650$$

$$1650 \div 30 \div 10 = 5.5$$

6. $4u \text{ --- } 22 + 50 + 22 = 100$

$$1u \text{ --- } 25$$

$$25 + 22 = 47$$

7. $4S + 3C = 430$

$$1S + 4C = 192$$

-----#

$$4S + 16C = 768$$

$$13C = 338$$

$$1C = 26$$

$$1S = 192 - 4 \times 26 = 88$$

$$4S = 4 \times 88 = 352$$

8. $2/3 \times 120 \times 50 \times 30 = 120000$

$$3h \times 50 \times 30 + h \times 30 \times 10 = 4800h$$

$$4800h = 120000$$

$$h = 25$$

$$25 \times 30 \times 10 = 7.5L$$

9. R:C:T

$$8:6:5$$

$$R \text{ ---- } 2:6$$

$$T \text{ ---- } 1:4$$

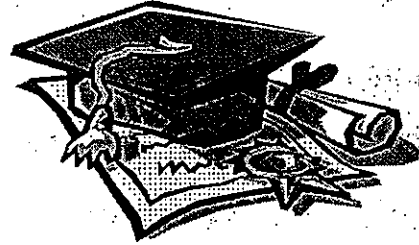
$$C \text{ ---- } 3:3$$

$$S: Un$$

$$3:13$$

10. A. $12y + 6 - y = 11u + 6$

B. $11x + 3 + 6 = 39$



11. A. $7+3+3=13$
 B. $13+3 \times 15 = 58$
 C. $1+(n-1) \times 3 = 3n-2$

12. A:M
 2:3
 8:12
 -----)
 17:3

$$17u - 3u = 14$$

$$14u \text{ ---- } 70$$

$$\text{A. } 9u \text{ --- } 45$$

$$\text{B. } 20u \text{ --- } 100$$

13. A. $3u \text{ --- } 84$

$$10u \text{ --- } 280$$

$$\text{B. } 28 \times 6 = 168$$

$$168 \div 14 = 12$$

14. A $76+44=120$

$$60\% \text{ ---- } 120$$

$$100\% \text{ --- } 200$$

$$\text{B } 125\% \text{ --- } 250$$

$$90/250 \times 100\% = 36\%$$

15. $2p \text{ --- } 109.9$

$$16p \text{ --- } 879.20$$

$$2556.8 - 899.2 = 1677.6$$

$$1677.6 \div 69.9 = 24$$

16. A. $2\text{min} \text{ ---- } \frac{1}{2} \text{ tank}$

$$1\text{min} \text{ ---- } \frac{1}{4} \text{ tank}$$

$$\text{B } 6\text{min} \text{ --- } 1\text{tank}$$

$$1\text{min} \text{ ---- } \frac{1}{6} \text{ tank}$$

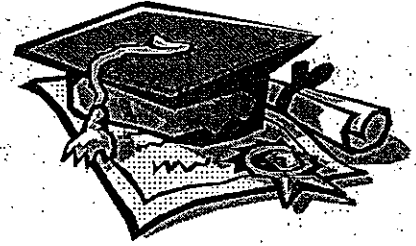
$$\frac{1}{4} + \frac{1}{6} = \frac{5}{12}$$

$$(1 - \frac{1}{4}) \div \frac{5}{12} = 1.8\text{mins}$$

$$1.80 + 1 = 2.8\text{mins}$$

17. A.) $D+R=85$

$$R+S=64$$



$$3u - 85 - 64 = 21$$

$$1u = 7$$

$$B) D + R + S = 85 + 7 = 92$$

$$100 - 92 = 8$$

$$18. A) 4 + 7 = 11u$$

$$1u = 4950 \div 11 = 450$$

$$18u = 450 \times 18 = 8100$$

$$B) \text{ All boy } = 5 + 2 = 7u$$

$$\text{ All girl } = 4 + 7 = 11u$$

$$11u - 7u = 4u$$

$$4u = 1800$$

