# Rosyth School
## First Semestral Assessment 2014
## Primary 6 Mathematics

Name: _____ Register No. _____

Class: Pr 6 -_____

Date: 12th May 2014 Parent's Signature: _____

Total Time for Booklets A and B : 50 minutes

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## 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 8 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. A number becomes 4 000 when rounded off to the nearest hundred. Which of the following could the number be?

   (1) 3 919

   (2) 3 988

   (3) 4 099

   (4) 4 181

2. Which of the following fractions is the largest?

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

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

   (3) $\frac{7}{11}$

   (4) $\frac{5}{12}$

3. 5 km 10 m = _____ km

   (1) 5.001

   (2) 5.01

   (3) 5.1

   (4) 5 010

4. What is the missing number in the box?

$$4 : 18 = \boxed{\ ?\ } : 45$$

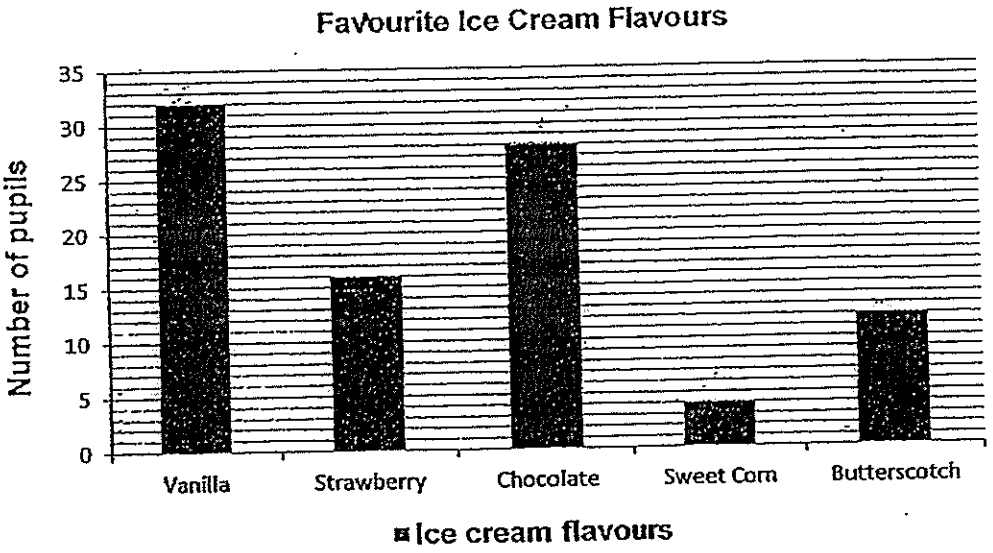
(1) 5

(2) 2

(3) 10

(4) 20

5. The bar graph shows the favourite ice cream flavour of a group of children.




What is the difference between the most favourite and least favourite flavours?

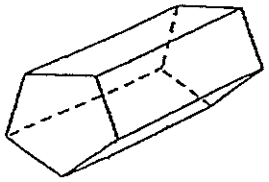
(1) 28

(2) 32

(3) 36

(4) 4

6. How many faces does the following solid have?



(1) 5

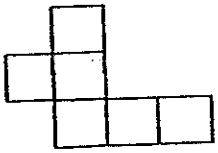
(2) 6

(3) 7

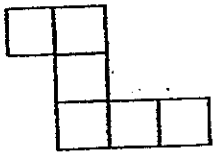
(4) 4

7. Which of the following is a net of a cube?

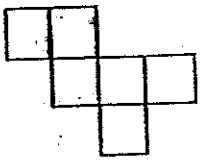
(1)



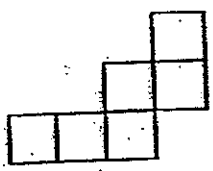
(2)



(3)



(4)



8. Find the value of $40 + (5r - 3) \times 3$, given that $r = 3$.

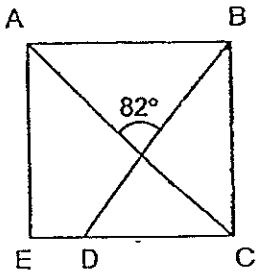
(1) 46

(2) 49

(3) 76

(4) 156

9. ABCE is a square. AC and DB are straight lines. Find $\angle ABD$.



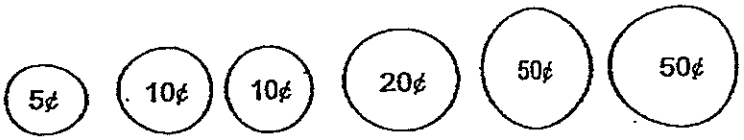

(1) 45°

(2) 49°

(3) 53°

(4) 98°

10. Zack had the following coins in his wallet.




He used three of the coins to pay for a pack of sweets. Which of the following amount could not be the price of the pack of sweets?

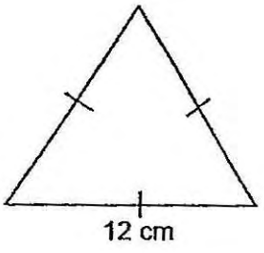
(1) 65¢

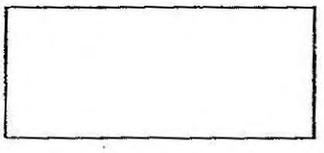
(2) 90¢

(3) $1.05

(4) $1.20

11. The equilateral triangle and the rectangle shown below have the same perimeter. The length of the rectangle is twice its breadth.
If the side of the triangle is 12 cm, what is the breadth of the rectangle?



(1) 6 cm

(2) 2 cm

(3) 9 cm

(4) 18 cm

12. Agnes and Mandy collect stickers. $\frac{3}{5}$ of Agnes' stickers is equal to $\frac{2}{5}$ of Mandy's stickers. If Agnes has 30 stickers, how many stickers do they have altogether?

(1) 45

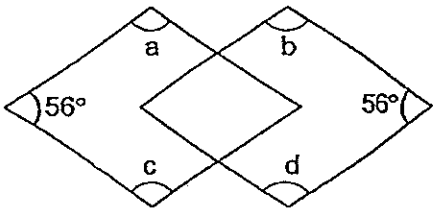
(2) 75

(3) 3

(4) 150

13. The figure below is made up of identical rhombuses.

Find $\angle a + \angle b + \angle c + \angle d$.




(1) 224°

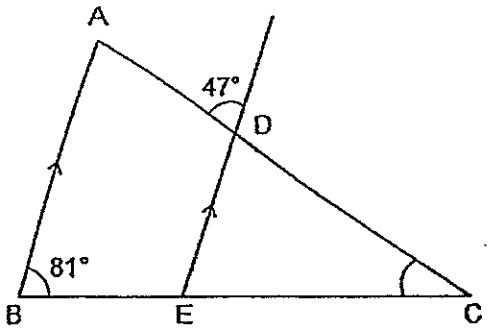
(2) 248°

(3) 272°

(4) 496°

14. In the figure below, ABC is a triangle. DE is a straight line, parallel to AB.

Find $\angle ECD$.




(1) 18°

(2) 34°

(3) 52°

(4) 128°

15. The ratio of number of magazines to number of books on a shelf is 5 : 7.
10 more magazines are added while 4 books are removed from the shelf.
The number of magazines and books are the same now.
How many books are there on the shelf at first?

(1) 35

(2) 45

(3) 49

(4) 98

**Go on to Booklet B**

Rosyth School
First Semestral Assessment 2014
Primary 6 Mathematics

Name: _____ Register No. _____

Class: Pr 6 -_____

Date: 12th May 2014 Parent's Signature: _____

Total Time for Booklets A and B : 50 minutes

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## 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. How many sixths are there in $4\frac{2}{3}$?

Ans: _____

17. Find the difference between 75 tenths and 218 hundredths.

Ans: _____

18. The table below shows the sale of coupons for a school carnival.

| Category | Coupon prices (in dollars) | Number of coupons sold |
|---|---|---|
| A | $2 | 2 015 |
| B | $5 | 923 |
| C | $10 | 376 |

Which category of coupons fetched the greatest amount of money?

Ans: Category_____

19. Express $\frac{5}{9}$ of 2.7 $\ell$ in millilitres.

Ans: _____ ml

20. Mrs Tan started baking at 10.45 a.m. It took her $2\frac{1}{2}$ h.
What time did she finish baking?

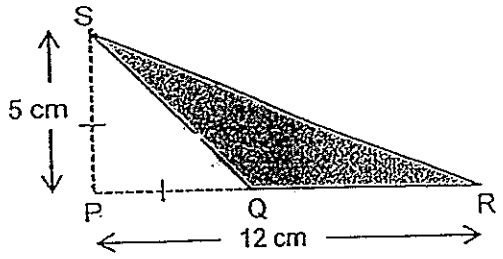
Ans: _____ p.m.

21. Farhan bought a pair of roller blades at 30 % discount.
How much did he pay for it?

Ans: $ _____

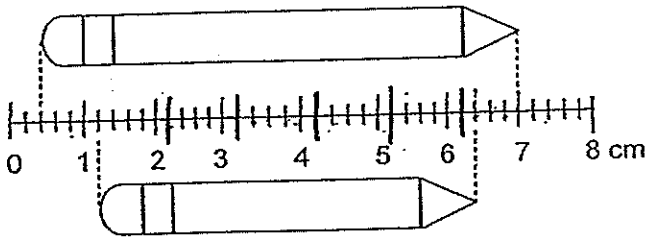
22. In the figure below, PQR is a straight line.

What is the area of the triangle SQR?



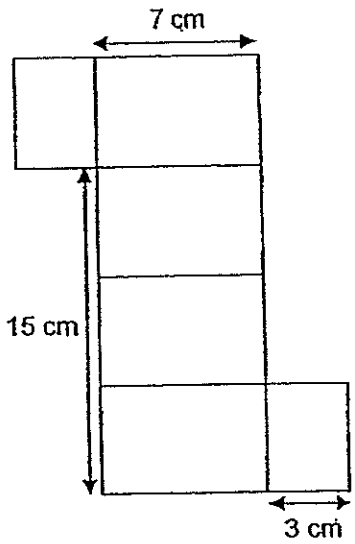

Ans: _____ $cm^2$

23. Two pencils are placed next to a scale.
What is the total length of the two pencils?



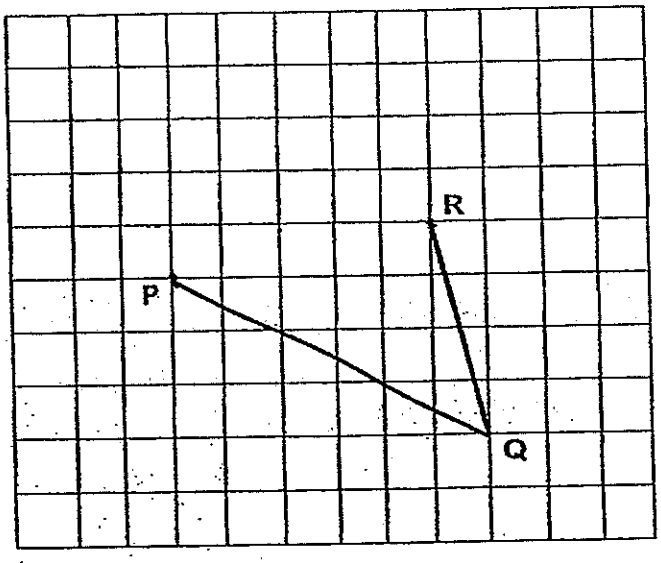

Ans: _____ cm

24. The net shown below can be folded to form a cuboid.
What is the volume of cuboid?




Ans: _____ $cm^3$

25. PQ and QR are two sides of a parallelogram. Complete the parallelogram by drawing the other two sides in the square grid below.



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)

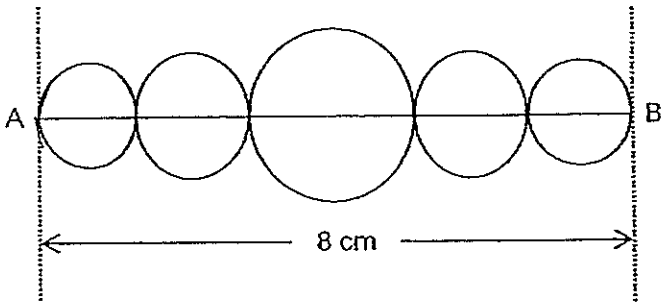
26. The average of 6 consecutive odd numbers is 54.
What is the largest of the 6 numbers?

Ans: _____

27. Tina had 90 sweets. She gave $3p$ sweets to her sister. Then she gave the rest to her four friends and they shared equally among themselves. How many sweets did each friend get? Leave your answer in terms of $p$.

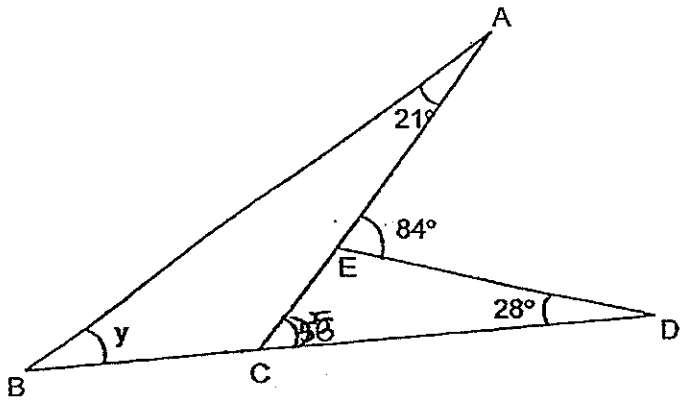
Ans: _____

28. The figure is made up of 5 circles arranged in a straight line.
Line AB passes through the centre of the 5 circles.
What is the total perimeter of the figure?
(Take $\pi = 3.14$)



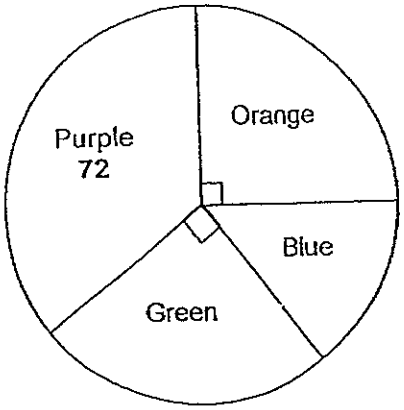

Ans: _____ cm

29. The figure below is not drawn to scale. AEC and BCD are straight lines.
Find the value of $\angle y$.

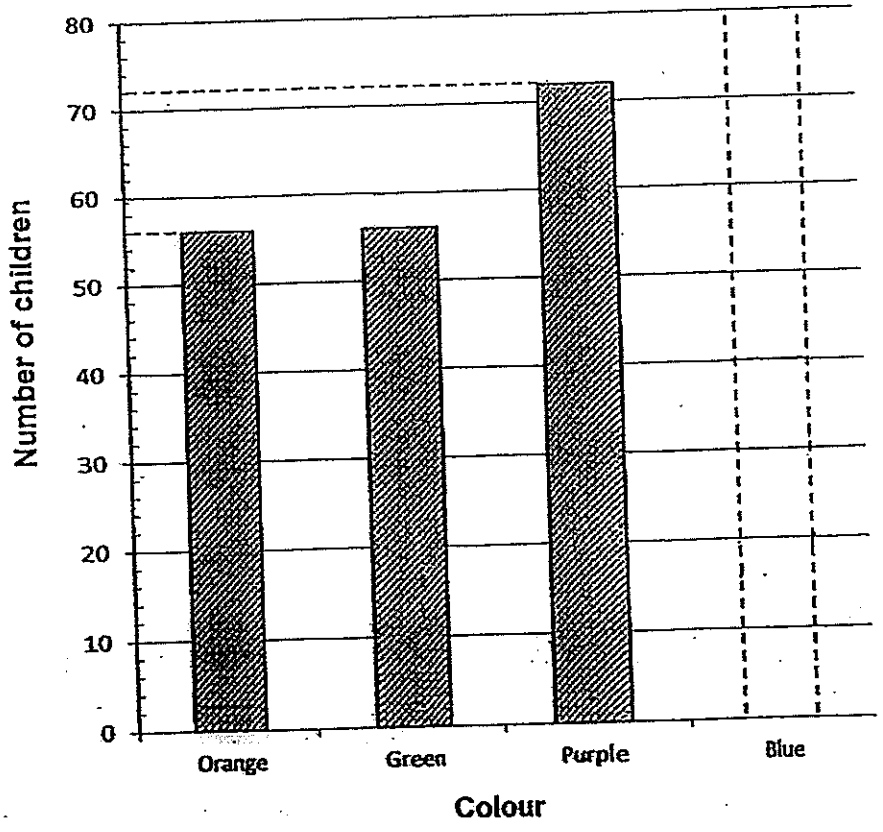



Ans: _____ °

30. Sarsa pens were available in 4 colours: blue, orange, green and purple. During a carnival, each child got to choose one pen. The pie chart shows the children's choice of pen colours.




The number of children who made their choice for each colour is also shown in the bar graph below. The bar that shows the number of children who chose blue was not drawn. Complete the bar graph by drawing the bar for this colour in the graph below.




**End of paper. Have you checked your work?**

# ANSWER SHEET

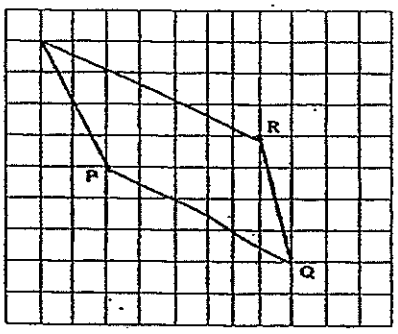
**EXAM PAPER 2014**
**SCHOOL : ROSYTH**
**PRIMARY : P6**
**SUBJECT : MATHEMATICS**
**TERM : SA1**

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

**16)28** **17)5.32** **18)B** **19)1500 ml** **20)1.15 p.m.**

**21)$62.30** **22)17.5 $cm^2$** **23)11.8 cm** **24)105 $cm^3$**

**25)** **26)59** **27)** $\frac{90 - 3p}{4}$ **28)25.12 cm**




**29)35°** **30)blue = 40**

Rosyth School
Preliminary Examination 2014
Primary 6 Mathematics

Name: _____ Register No. _____

Class: Pr 6 - _____

Date: 19 August 2014 Parent's Signature: _____

Total Time for Booklets A and B : 50 minutes

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**PAPER 1**
**(Booklet A)**

Instructions to Pupils:

1. Do not open this booklet until you are told to do so.
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|---|---|---|
| Paper 1 (Booklet A) | 20 | |

*** This booklet consists of 10 pages (including this 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 oval (1, 2, 3 or 4) on the Optical Answer Sheet.

(20 marks)

All diagrams in this paper are not drawn to scale.

1. How many thousands are there in a million?

(1) 100

(2) 1 000

(3) 10 000

(4) 100 000

2. Which of the following shows the numeral 5 in the hundredths place?

(1) 0.01543

(2) 0.1543

(3) 1.543

(4) 1 543

3. $\boxed{?} \div 10 = 0.123 \times 100$

What is the missing number in the box?

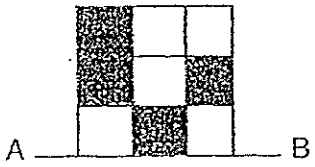
(1) 1.23

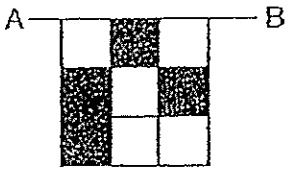
(2) 12.3

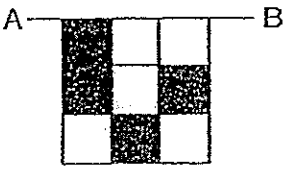
(3) 123

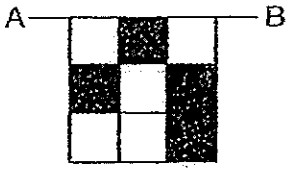
(4) 1 230

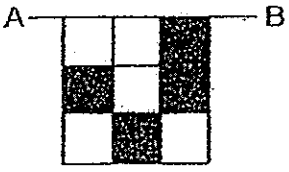
4. The top half of a symmetric figure is shown below. AB is the line of symmetry. Which one of the following completes the symmetric figure?



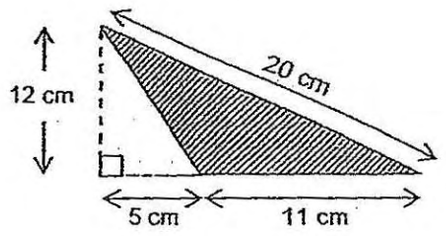

(1) 


(2) 


(3) 


(4) 

5. Find the area of the shaded triangle shown below.




(1) 30 $cm^2$

(2) 66 $cm^2$

(3) 110 $cm^2$

(4) 120 $cm^2$

6. Matthias drove from his house to his work place at a speed of 84 km/h. He took 15 minutes to get there. How far was his work place from his house?

(1) 12.6 km

(2) 21 km

(3) 210 km

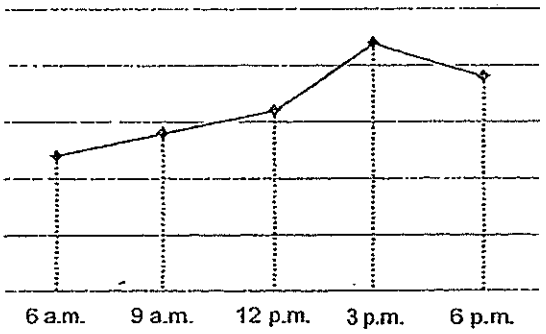
(4) 1 260 km

7. The table below shows the temperature at various times on a certain day.

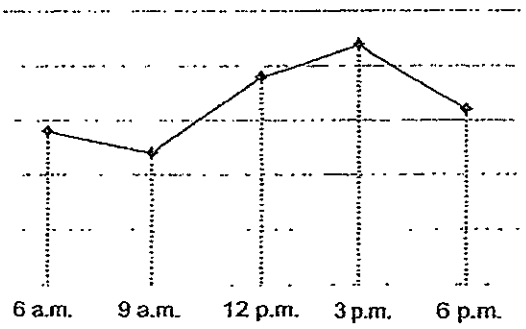
| Time | 6 a.m. | 9 a.m. | 12 p.m. | 3 p.m. | 6 p.m. |
|---|---|---|---|---|---|
| Temperature | 12 | 19 | 16 | 22 | 14 |

A graph with a missing temperature scale is drawn. Which of the following could be the graph that shows the information given in the table?

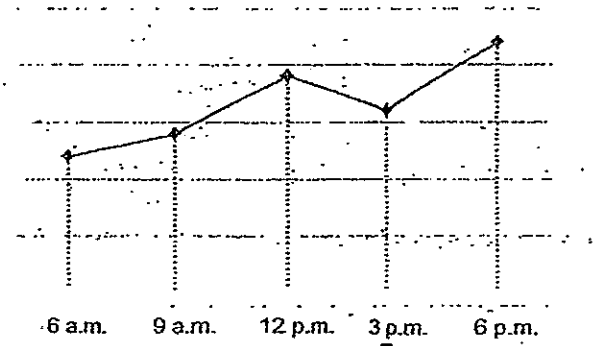
(1)



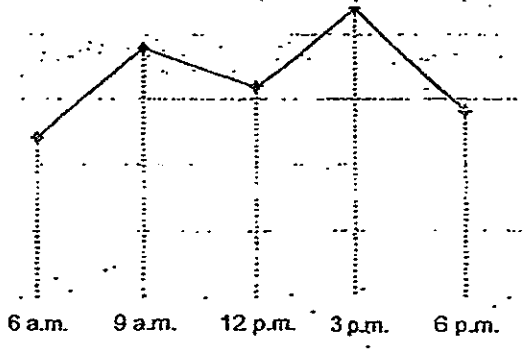

(2)




(3)




(4)



8. Christel mixed 700 g of soya beans, 270g of red beans and 0.03 kg of green beans together. How much mixed beans were there altogether?

(1) 970.03 g

(2) 973 g

(3) 1 000 g

(4) 1 270 g

9. The calendar below shows the month of November in 2014.
Leena crossed out 4 November. She will be travelling to Iceland 57 days later from the date she crossed out. Which day will she be travelling?
(There are 30 Days in November)

| November | | | | | | |
|---|---|---|---|---|---|---|
| Mon | Tue | Wed | Thur | Fri | Sat | Sun |
| | | | | | 1 | 2 |
| 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 |

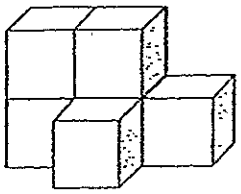
(1) Monday

(2) Wednesday

(3) Thursday

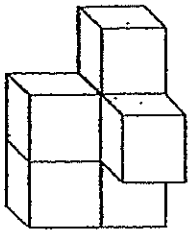
(4) Sunday

10. The solid below is made up of 6 identical cubes which has been glued together.

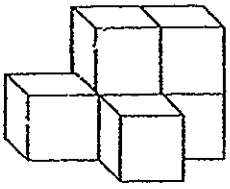


Which of these is the solid above after it is rotated?

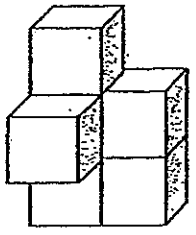
(1)



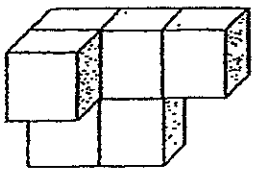
(2)



(3)



(4)



11. Rebecca bought a cake and ate $\frac{1}{5}$ of the cake. She then gave away $\frac{1}{3}$ of the remainder to her sister. What fraction of the cake was left?

(1) $\frac{1}{15}$

(2) $\frac{2}{15}$

(3) $\frac{4}{15}$

(4) $\frac{8}{15}$

12. 40% of the pupils who attended a concert are boys. Halfway through the concert, 10% of the girls and 25% of the boys left the concert. What percentage of the pupils remained at the concert?

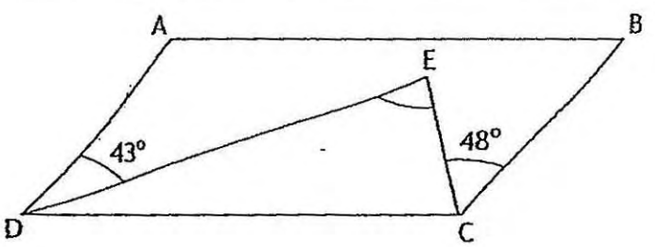
(1) 16%

(2) 35%

(3) 65%

(4) 84%

13. The figure shows a parallelogram ABCD and a triangle CDE. Find $\angle CED$.




(1) 43°

(2) 89°

(3) 91°

(4) 101°

14. In a biathlon race, athletes need to swim 1 km and run 15 km.
Catherine and Betty took part in the biathalon.

For the swimming event, Catherine completed the swim in 28 mins and Betty took 9 mins longer than Catherine.
For the running event, Betty ran at 7.5 km/h and Catherine was 8 mins faster than Betty.

Which of the table below best describes Catherine and Betty's timing for the Biathalon?

(1)

| | Swim | Run |
|---|---|---|
| Catherine | 28 mins | 128 mins |
| Betty | 37 mins | 120 mins |

(2)

| | Swim | Run |
|---|---|---|
| Catherine | 28 mins | 112 mins |
| Betty | 37 mins | 120 mins |

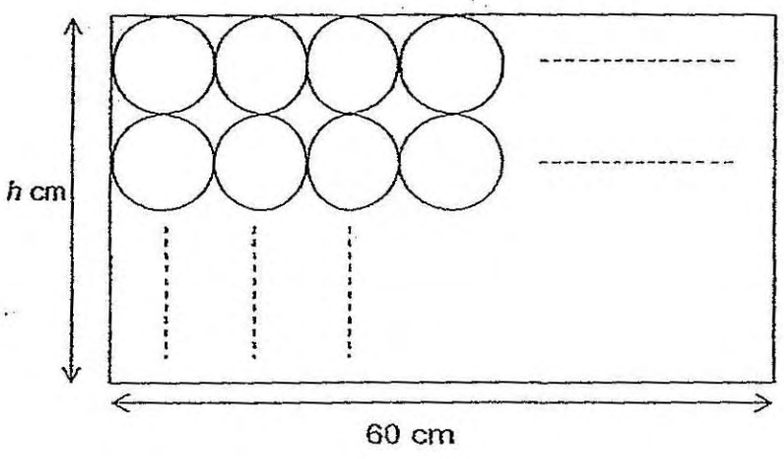
(3)

| | Swim | Run |
|---|---|---|
| Catherine | 28 mins | 128 mins |
| Betty | 19 mins | 120 mins |

(4)

| | Swim | Run |
|---|---|---|
| Catherine | 28 mins | 112 mins |
| Betty | 19 mins | 120 mins |

15. Jeremy had cut some identical circles of radius 2 cm from a rectangular cardboard measuring 60 cm by $h$ cm as shown below. What was the maximum number of circles he cut?
Give your answer in terms of $h$ in the simplest form.




(1) 3.75h

(2) 7.5h

(3) 15h

(4) 30h

**Go on to Booklet B**

**Rosyth School**
**Preliminary Examination 2014**
**Primary 6 Mathematics**

Name: _____ Register No. _____

Class: Pr 6 - _____

Date: 19 August 2014 Parent's Signature: _____

Total Time for Booklets A and B : 50 minutes

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**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 7 pages (including this 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.
All diagrams in this paper are not drawn to scale.

(10 marks)

16. $7 - 0.011 =$ _____

Ans: _____

17. Find $1 \div \frac{3}{5}$. Give your answer as a fraction in its simplest form.

Ans: _____

18. Find the value of $50 \times 0.18$.

Ans: _____

19. 12 : 8 is the same as 15 : ☐

What is the missing number in the box?

Ans: _____

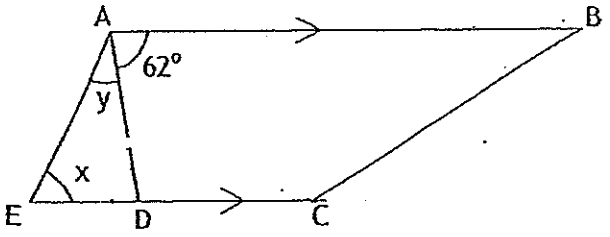
20. How many 5-cent coins are there in $11.05?

Ans: _____

21. Shi Yao took a flight from Singapore and arrived at Beijing at 1.15 p.m. The duration of the flight is 6 hours and 35 minutes. At what time did she depart Singapore?

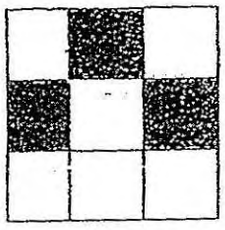
Ans: _____ a.m / ~~p.m.~~

22. The figure shown below is made up of a triangle AED and a trapezium ABCD. CDE is a straight line. Find the sum of $\angle x$ and $\angle y$.




Ans: _____ °

23. The big square below is made up of 9 identical small squares. The total area of the unshaded parts is 24 $cm^2$. Find the length of the big square.



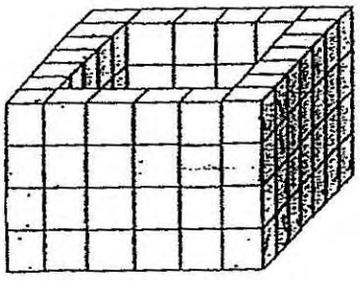
Ans: _____ cm

24. Arrange the following fractions from the smallest to the largest.

$\frac{4}{5}$ , $\frac{5}{6}$ , $\frac{9}{11}$ , $\frac{11}{13}$

Ans: _____

25. The figure above shows a cuboid made up of identical cubes. There is a hole all the way through the cuboid. How many cubes would be needed to fill the hole in the cuboid completely?

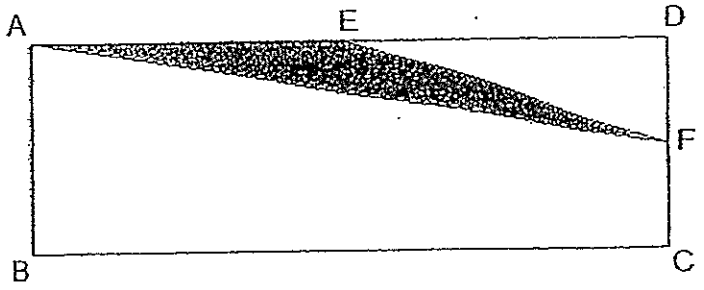


Ans: _____

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. ABCD is a rectangle. E is the midpoint of AD and F is the midpoint of CD. The ratio of the length of the rectangle to the breadth of the rectangle is 3 : 2. What fraction of the rectangle is shaded?

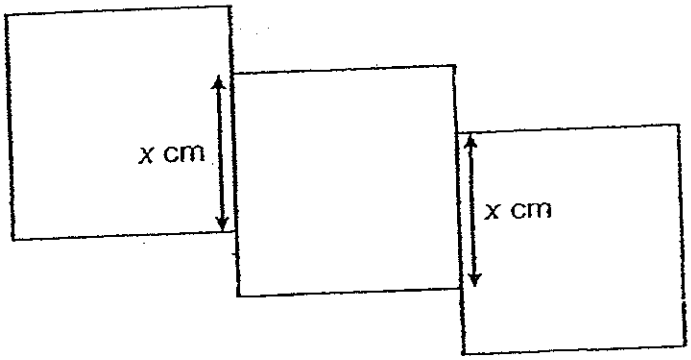



Ans: _____

27. A cubical tank of length 20 cm is completely filled with water. All the water was transferred from the cubical tank into a rectangular container with a square base of 250 $cm^2$. What was the water level in the rectangular container?

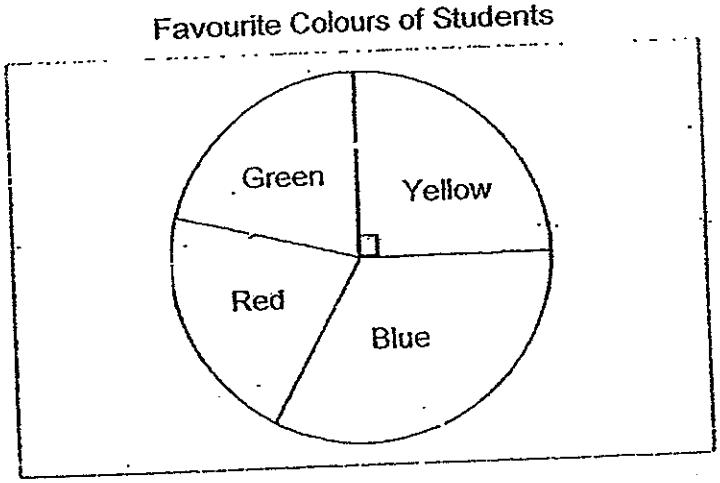
Ans: _____ cm

28. The diagram below is made up of three identical squares, each with side measuring 5 cm. Find the perimeter of the whole figure.
Give your answer in terms of x in the simplest form.




Ans: _____ cm

29. The pie chart shows the favourite colours of a group of students
$\frac{1}{3}$ of the pupils like blue and an equal number of pupils like green and red.
The rest of the pupils like yellow. 25 of the pupils like green, how many pupils were there?

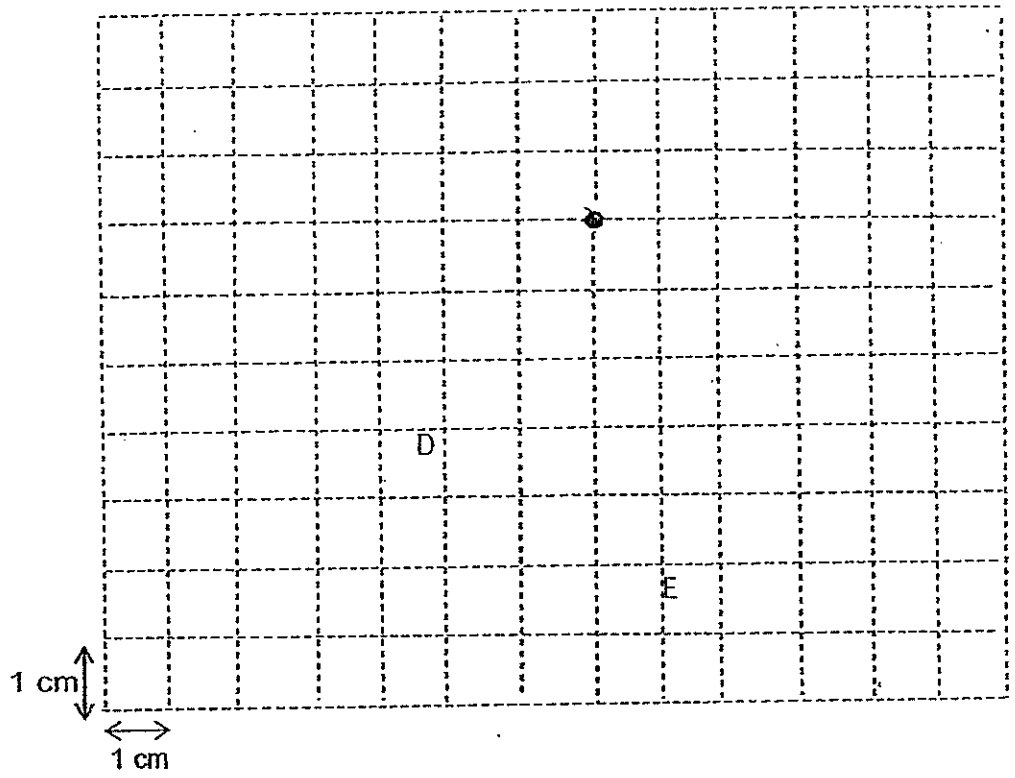



Ans: _____

30. The square grid below is made up of 1 cm squares. Construct the trapezium DEFG such that:

(i) DE is parallel to FG,
(ii) FE is perpendicular to DE and
(iii) FG is twice the length of DE and passes through point X.

Line DE is drawn for you. Label all the points.




**End of paper. Have you checked your work?**