40

Red Swastika School
Primary 6
Class Test 2
Mathematics

Name: _____ ( ) **Date: 3 May 2023**

Class: Pr 6 / _____ **Duration: 50 minutes**
(Use of calculators is not allowed)

Parent's Signature: _____

Questions **1** to **10** 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) and write your answer on the Optical Answer Sheet. (20 marks)

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1 The number of red apples to the number of green apples in a basket is 2 : 5
What fraction of all the apples in the basket are red?

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

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

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

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

2 The usual price of a book is $18. During a sale, there was a 10% discount.
Find the discount given.

(1) $1.80

(2) $2.00

(3) $16.20

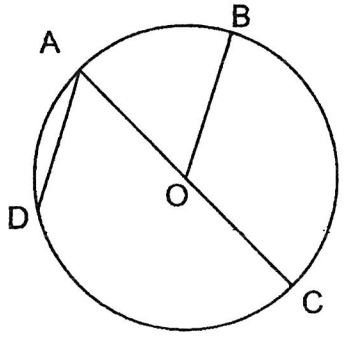
(4) $19.80 ( )

4

3 In a group of 70 children, 42 of them wore glasses. What percentage of the children **do not** wear glasses?

(1) 28%
(2) 40%
(3) 42%
(4) 60% ( )

4 The figure below shows a circle with centre O. Which of the following shows the correct way to find the area of the circle?



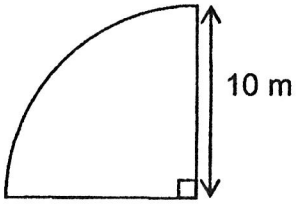
(1) π x AD x AC

(2) π x AD x OA

(3) π x OC x AC

(4) π x OA x OC ( )

5 Find the perimeter of the quarter-circle. (Take π = 3.14)



(1) 15.7 m
(2) 35.7 m
(3) 78.5 m
(4) 82.8 m ( )

6

6 Mr Ng spent 80% of his money on a laptop and had $1200 left. How much did Mr Ng spend on the laptop?

(1) $300
(2) $1500
(3) $4800
(4) $6000 ( )

7 A box contains beads of three different colours. $\frac{1}{4}$ of the beads are black. The ratio of the number of yellow beads to green beads is 1 : 5. What is the ratio of the number of black beads to yellow beads to green beads in the simplest form?

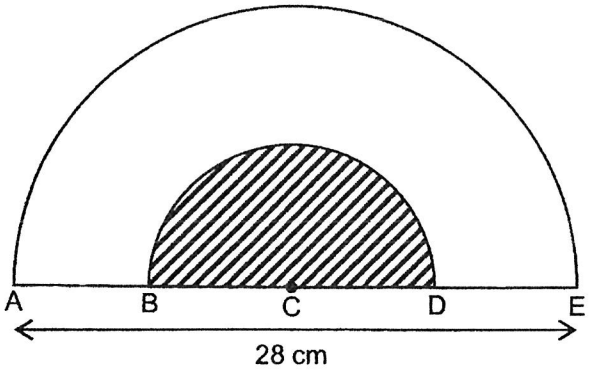
(1) 1 : 1 : 5
(2) 2 : 1 : 5
(3) 3 : 1 : 5
(4) 3 : 2 : 10 ( )

8 Penny wanted to mix red and blue paint to make purple paint. The ratio of the amount of red paint used to the amount of blue paint used was 3 : 4. Penny used 120 ℓ of red paint, how much purple paint did she make?

(1) 90 ℓ
(2) 160 ℓ
(3) 210 ℓ
(4) 280 ℓ ( )

6

9 The figure is made up of 2 semi-circles. AB = BC = CD = DE. Find the area of the **unshaded** part. (Take $\pi = \frac{22}{7}$)



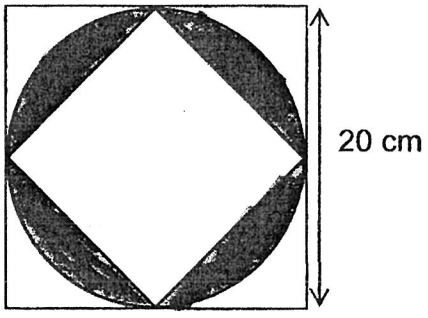
(1) 77 cm^2

(2) 231 cm^2

(3) 308 cm^2

(4) 462 cm^2 ( )

10 The figure below shows a circle and two squares.
One side of the larger square is 20 cm. Find the area of the shaded parts in terms of π.



(1) (20 π - 100) cm^2

(2) (20 π – 200) cm^2

(3) (100 π – 100) cm^2

(4) (100 π – 200) cm^2 ( )

4

Questions **11** to **16** carry 2 marks each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

(12 marks)

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11 Pete scored a total of 90 marks for his Math test in October. This was a 20% increase from the marks he scored for his Math test in May.
How many marks did he score for his Math test in May?

Ans: _____

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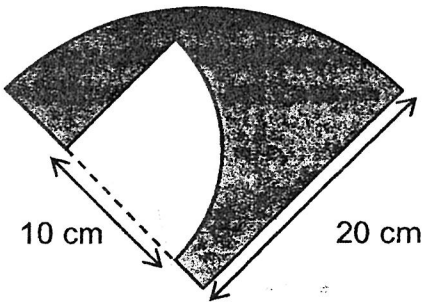
12 A baker baked 30 curry buns and some kaya buns in the morning. After selling 5 curry buns and 30% of the kaya buns, she had a total of 67 buns left. How many kaya buns did the baker bake?

Ans: _____

4

13 Timothy had a piece of cardboard in the shape of a quarter-circle. He cut out a smaller quarter-circle from the cardboard as shown below. Find the perimeter of the remaining piece of cardboard. (Take $\pi = 3.14$)



Ans: _____ cm

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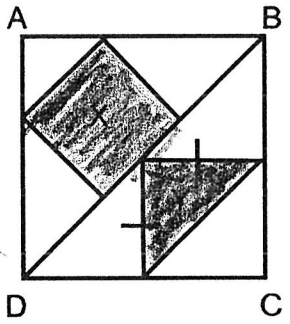
14 ABCD is a square. The shaded parts, square X and right-angled triangle Y, have corners lying on either sides of square ABCD or on the line BD. What is the ratio of the area of square X to the area of triangle Y?



Ans: _____

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15 After a discount of 20%, the price of an electric iron is $160. Shoppers who pay by cash are given an additional discount of $10. What is the total percentage discount given to shoppers who paid by cash for the electric iron?

Ans: _____ %

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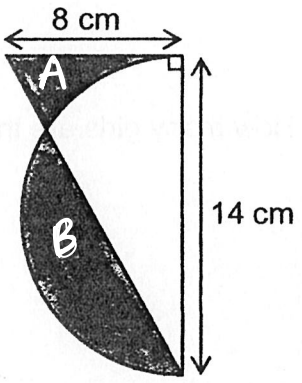
16 The figure below is made up of a semicircle and a right-angled triangle. The diameter of the semi-circle is 14 cm. The area of the shaded region A is 16 cm^2. Find the area of the shaded region B.
(Take $\pi = \frac{22}{7}$)



Ans: _____ cm^2

Questions **17** and **18** carry 4 marks each. Show your working clearly and write your answers in the spaces provided. (8 marks)

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17 There is an equal number of students in the Robotics Club and the Art Club. There are 40 more boys than girls in the Robotics Club. There are 20 more girls than boys in the Art Club. 55% of all the students in the Robotics Club and Art Club are boys.

(a) How many girls are there in both the clubs?

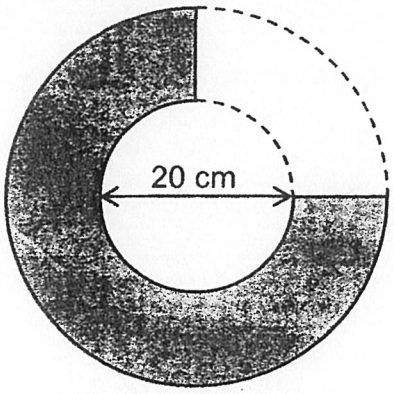
Ans: _____ [3m]

(b) How many girls are there in the Robotics Club?

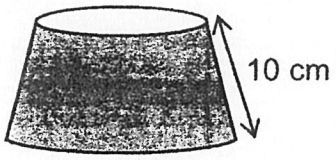
Ans: _____ [1m]

4

18 A quarter of a piece of circular coloured paper had been cut out as shown below.



Coloured paper



Lamp shade

The remaining piece of coloured paper was then folded to form a lamp shade without overlapping. What is the area of the lamp shade in terms of π?

Ans: _____ [4m]

Red Swastika School
Primary 6 Mathematics Milestone Check (5)
Topic: Volume of Solids and Liquids

15

Name:_____( )

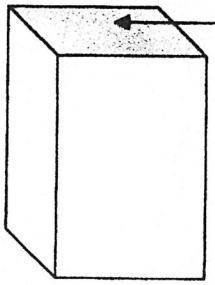
Class: Pr 6 _____ Date: _____

For Questions 1 to 5, each question carries 2 marks. All workings must be shown clearly.

1. A cube has a volume of 125 cm^3. What is the length of the cube?

Ans: _____ cm

2 Find the height of the cuboid below if its volume is 960 cm^3.



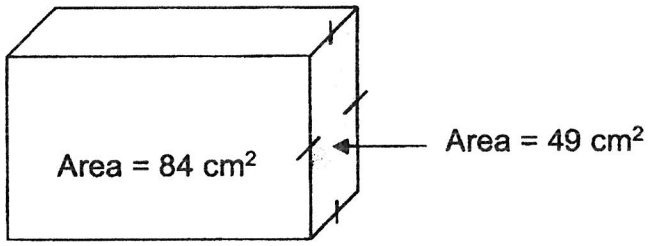
Shaded area = 64 cm^2

Ans: _____ cm

3. A tank with a square base of side 50 cm, contains 10 ℓ of water. Find the height of the water in the tank.

Ans: _____ cm

4. Find the volume of the cuboid.



Ans: _____ cm³

5. How many 2-cm cubes can be cut from a wooden block measuring 50 cm by 40 cm by 15 cm?

Ans: _____

Question 6 carries 5 marks. All workings must be shown clearly.

6. Water flows from a small tap at a rate of 30 litres per minute and a big tap at a rate of 40 litres per minute. If the 2 taps are turned on at the same time for 5 minutes, the water from both taps can fill a tank, 50 cm long and 40 cm wide, completely. What is the height of the tank?

Ans: _____

----------THE END----------

Red Swastika School
Primary 6 Mathematics Milestone Check (6)
Topic: Pie Charts

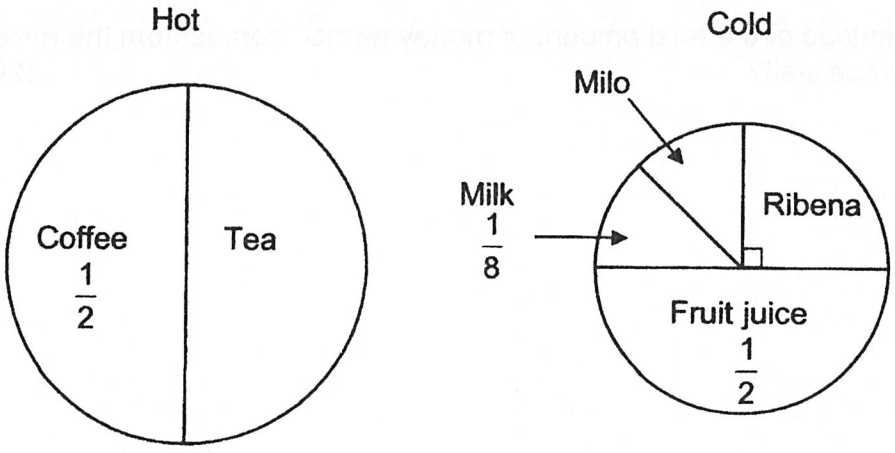
15

Name:_____( )

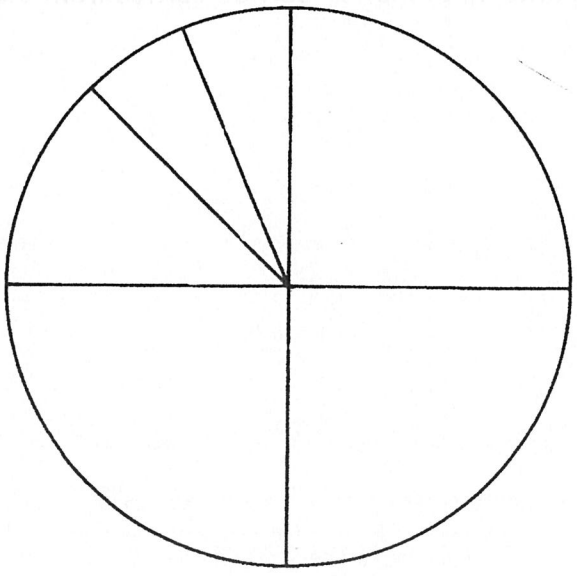
Class: Pr 6 _____ Date: _____

Question 1 carries 1 mark, Questions 2 to 6 carry 2 marks each and Question 7 carries 4 marks. Show your working clearly and write your answer in the spaces provided.

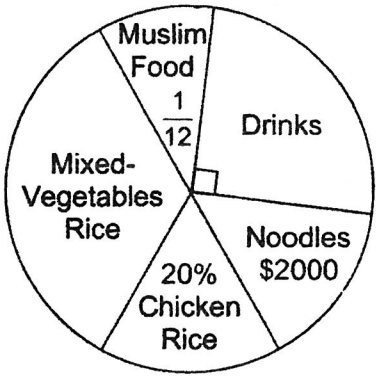
1. The pie charts below show the different types of drinks the drink stall vendor sells. He sells an equal number of hot and cold drinks.



Combine the total number and types of drinks (hot and cold) he sells. Then complete the following pie chart to show **all** the different types of drinks that he sells.Label the drinks in the chart below clearly. [1m]



The pie chart below represents the average amount of money earned by 5 food stalls in a school canteen. Half of the amount earned comes from mixed-vegetable rice stall and chicken rice stall. Use the information below to answer questions 2 to 7.



2. What percentage of the total amount of money earned comes from the mixed-vegetables rice stall? [2m]

Ans: _____%

3. What fraction of the total amount of money earned comes from the noodles stall? [2m]

Ans: _____

4. What was the ratio of the amount of money earned by the Muslim food stall to the amount of money earned by the drinks stall? [2m]

Ans: _____

5. How much money was earned from all the 5 food stalls? [2m]

Ans: $_____

6. How much more money was earned by the mixed-vegetables rice stall than the chicken rice stall? [2m]

Ans: $_____

7. Mr Lee sells one plate of Muslim food for $1.00. If he increases the selling price by 50% per plate and sold the same number of plates of Muslim food, how much money will he collect? [4m]

Ans: _____

----------THE END----------

YEAR : 2023
LEVEL : PRIMARY 6
SCHOOL : RED SWASATIKA SCHOOL
SUBJECT : MATHEMATICS
TERM : PAPER 2

CLASS TEST 2

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

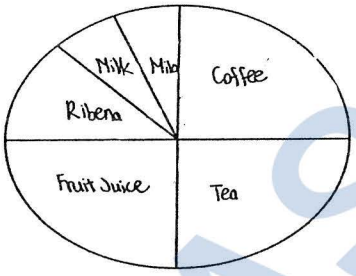
Q11	120% = 90 100% = $\frac{90}{120}$ x 100 = 75
Q12	30 – 5 = 25 67 – 25 = 42 70% = 42 100% = $\frac{42}{70}$ x 100 = 60
Q13	3.14 + 20 + 15.7 + 10 + 10 = 51.4 + 15.7 + 10 + 10 87.1
Q14	4 : 5 : 9 16 : 20 : 36 1 : 3 : 4 9 : 27 : 36 Ans : 16 : 9
Q15	80% = 160 100% = $\frac{160}{80}$ x 100 = 200 $\frac{50}{200}$ x 100 = 25%
Q16	B + C = $\frac{1}{2}$ x $\frac{22}{7}$ x 7 x 7 = 77 A + C = $\frac{1}{2}$ x 14 x 8 = 56 56 – 16 = 40 B = 77 – 40 = 37cm^2
Q17	(a) Boys : 2u + 50 (55%0 Girls : 2u + 30 (45%0 10% = 20 45% = $\frac{20}{10}$ x 45 = 90 b) 2u + 30 = 90 2u = 90 – 30 = 60 Robotic girls = 30

Q18	Area of shaded = $\frac{3}{4}$ $big - small$ = $\frac{3}{4}$ x ∏ x 20 x 20 - $\frac{3}{4}$ x ∏ x 10 x10 = 225∏

VOLUME OF SOLIDS AND LIQUID

Q1	$\sqrt[3]{125} = 5$	Q2	960 ÷ 64 = 15cm
Q3	$\frac{10000}{50\ x\ 50} = 4$	Q4	84 ÷ 7 = 12 12 x 7 x 7 = 588
Q5	50 ÷ 2 = 25 40 ÷ 2 = 20 15 ÷ 2 = 7R1 25 x 20 x 7 = 3500	Q6	40 + 30 = 70 70 x 5min = 350 V = L X B X H 350 = 50 x 40 x x x = 350 ÷2000 ≈ 5.714 = ~~5.40cm~~ 5.70cm

PIE CHARTS

Q1		Q2	30%
Q3	$\frac{60}{60} - \frac{4}{60} - \frac{15}{60} - \frac{12}{60} - \frac{18}{60}$ = $\frac{11}{60}$	Q4	M : D 5 : 25 1 : 3
Q5	$\frac{1}{6}$ = 2000 $\frac{6}{6}$ = 2000 x 6 = $12000	Q6	100% : 12000 10% = $1200
Q7	$\frac{50}{100}$ x 1 = 0.50 $\frac{1}{12} \div 2 = \frac{1}{24}$ $\frac{1}{12} + \frac{1}{8} = \frac{1}{24}$ 100 ÷ 8 = 12.5 $\frac{12\,000}{100}$ x 12.5 = $1500		

2

END