

Name: _____ ()

Class: Primary 5 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL (PRIMARY)



Primary 5 Mathematics

2020 End - Year Assessment

Paper 1

Booklet A

27 October 2020

**15 questions
20 marks**

Total Time for Booklets A and B: 1 hour

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.
Follow all instructions carefully.
Answer all questions.
Write your answers in this booklet.
The use of calculators is **NOT** allowed.

This booklet consists of 9 printed pages.

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.
(20 marks)

1. 206 081 is 10 000 more than _____.

(1) 216 081

(2) 205 081

(3) 196 081

(4) 106 081

2. Which one of the following numbers is more than $\frac{1}{2}$?

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

(2) $\frac{3}{8}$

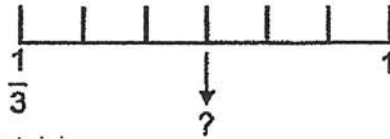
(3) $\frac{5}{9}$

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

3. Express $4\frac{8}{20}$ as a decimal.

- (1) 4.04
- (2) 4.08
- (3) 4.32
- (4) 4.40

4. In the number line below, what is the value of the missing number?



- (1) $\frac{1}{2}$
- (2) $\frac{7}{12}$
- (3) $\frac{2}{3}$
- (4) $\frac{5}{6}$

5. There are 300 vehicles at a car park. 60% of the vehicles are lorries. How many lorries are there at the car park?

(1) 120

(2) 180

(3) 200

(4) 240

6. Which one of the following ratios is in the simplest form?

(1) 9 : 56

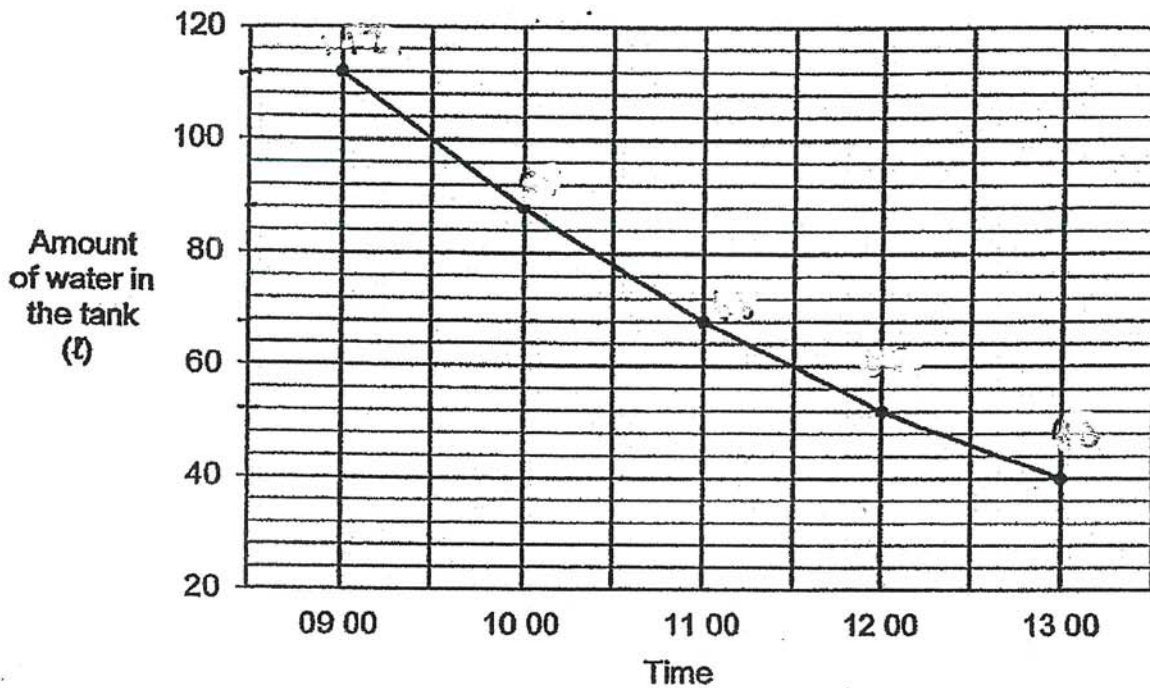
(2) 8 : 42

(3) 7 : 28

(4) 6 : 27

A tank was completely filled with water at 09 00. Water was drained out of the tank from 09 00 to 13 00. The line graph shows the volume of water left in the tank from 09 00 to 13 00.

Use the graph below to answer questions 7 and 8.



7. What is the capacity of the tank?

- (1) 40 ℓ
- (2) 72 ℓ
- (3) 112 ℓ
- (4) 120 ℓ

8. In which of the following periods was 12 ℓ of water being drained out of the tank?

- (1) From 09 00 to 10 00
- (2) From 10 00 to 11 00
- (3) From 11 00 to 12 00
- (4) From 12 00 to 13 00

9. Express 60 050 g in kg.

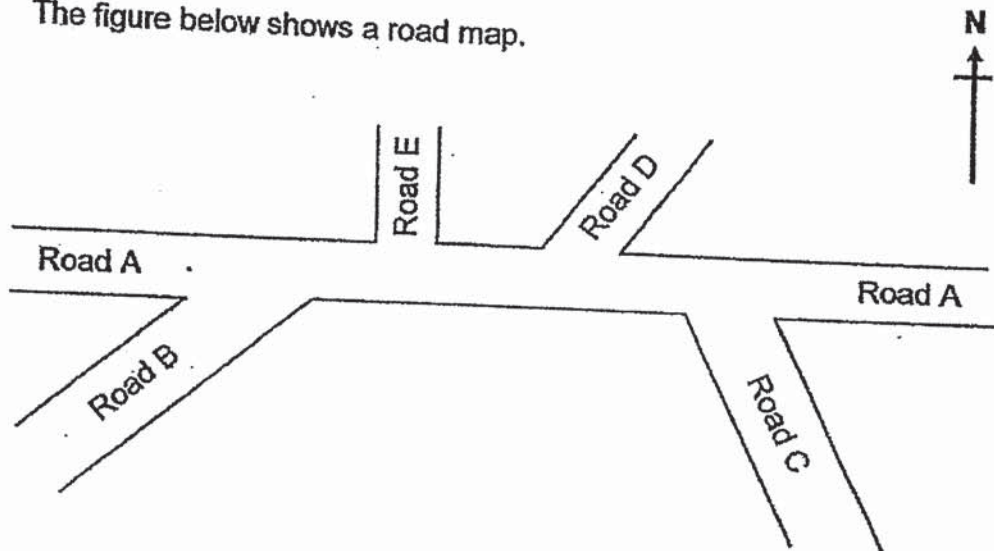
(1) 6.005 kg

(2) 60.05 kg

(3) 60.5 kg

(4) 600.5 kg

10. The figure below shows a road map.



A taxi moved along Road A. After the taxi turned into another road, it faced north-east. Which road did it turn into?

(1) B

(2) C

(3) D

(4) E

11. Ting had 40 fifty-cent coins and 30 twenty-cent coins. She exchanged all her coins for some two-dollar notes. How many two-dollar notes did she exchange all her coins for?
-

- (1) 13
- (2) 26
- (3) 35
- (4) 52

12. Matt had 80 game cards and Oscar had 60 game cards. Oscar gave 10% of his game cards to his cousin. What was the total number of game cards Matt and Oscar had in the end?
-

- (1) 86
- (2) 126
- (3) 132
- (4) 134

- 13 The table below shows the postage rates of mail in a city.

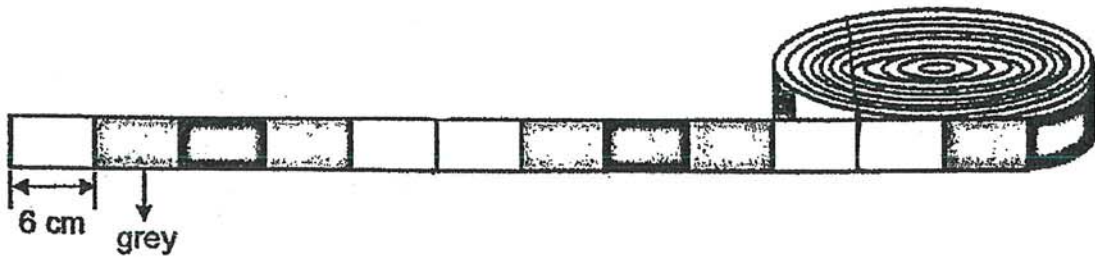
| Mass step up to | Postage rates of mail |
|-----------------|-----------------------|
| 100 g | \$0.70 |
| 250 g | \$1.00 |
| 500 g | \$1.25 |
| 1 kg | \$2.65 |
| 2 kg | \$3.45 |

Hebe sent 2 mails of mass 100 g and 1200 g to different places. How much did she pay altogether?

- (1) \$4.75
 - (2) \$4.15
 - (3) \$3.45
 - (4) \$3.35
14. Kai and Dinny folded paper stars over two days. On Friday, Kai folded 21 more paper stars than Dinny. On Saturday, Dinny folded another 39 paper stars. At the end of the two days, Kai folded $\frac{3}{7}$ of the total number of paper stars. How many paper stars did Kai fold?

- (1) 126
- (2) 72
- (3) 54
- (4) 18

15. A piece of ribbon, 270 cm long, is made up of white, grey and black segments as shown below. Each segment is 6 cm long. The segments follow a repeated pattern. How many white segments are there?



- (1) 18
(2) 27
(3) 90
(4) 108

****End of Booklet A****

Name : _____ ()

Class : Primary 5 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL (PRIMARY)



Primary 5 Mathematics

2020 End - Year Assessment

Paper 1

Booklet B

27 October 2020

| | |
|-----------------|----|
| Booklet A | 20 |
| Booklet B | 25 |
| Total (Paper 1) | 45 |

Total time for booklets A and B : 1 hour

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.

Follow all instructions carefully.

Answer all questions.

Write your answers in this booklet

The use of calculators is **NOT** allowed.

This booklet consists of 10 printed pages.

Questions 16 to 20 carry 1 mark 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. (5 marks)

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16. In 2.516 which digit is in the thousandths place?

Ans : _____

17. Find the value of $160 \div 4 \times 5 + (19 - 3)$.

Ans : _____

18. A piece of cloth was cut into 20 equal pieces. Each piece was $\frac{3}{4}$ m.

What was the total length of the 20 pieces of cloth?

Ans : _____ m

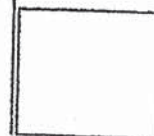
19. A book costs \$56 before a 7% GST. How much is the GST?

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Ans : \$ _____

20. Mrs Aiken paid \$330 to carpet a room with an area of 30 m^2 . What was the cost of carpeting the room per square metre?

Ans : \$ _____



Questions 21 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.

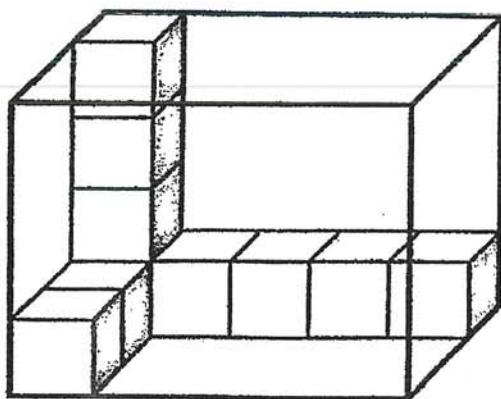
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21. Arrange the following from the largest to the smallest.

$$\frac{11}{10}, 1.9, 1\frac{1}{4}, \frac{9}{5}$$

Ans : _____ , _____ , _____ , _____

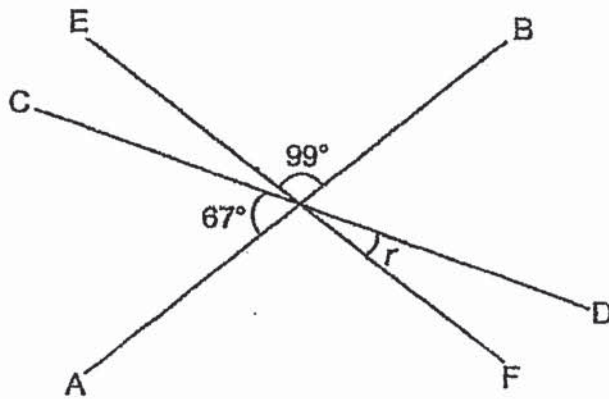
22. The figure below shows a rectangular glass box partly filled with 1-cm cubes. When the box is completely filled with the 1-cm cubes, what is the volume of the box?



Ans : _____ cm³

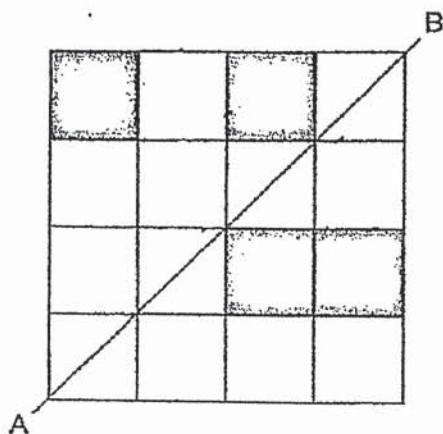


23. In the figure below, AB, CD and EF are straight lines. Find $\angle r$.

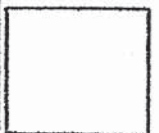


Ans : _____°

24. The figure below is made up of squares. Shade four more squares to form a symmetric figure with AB as the line of symmetry.

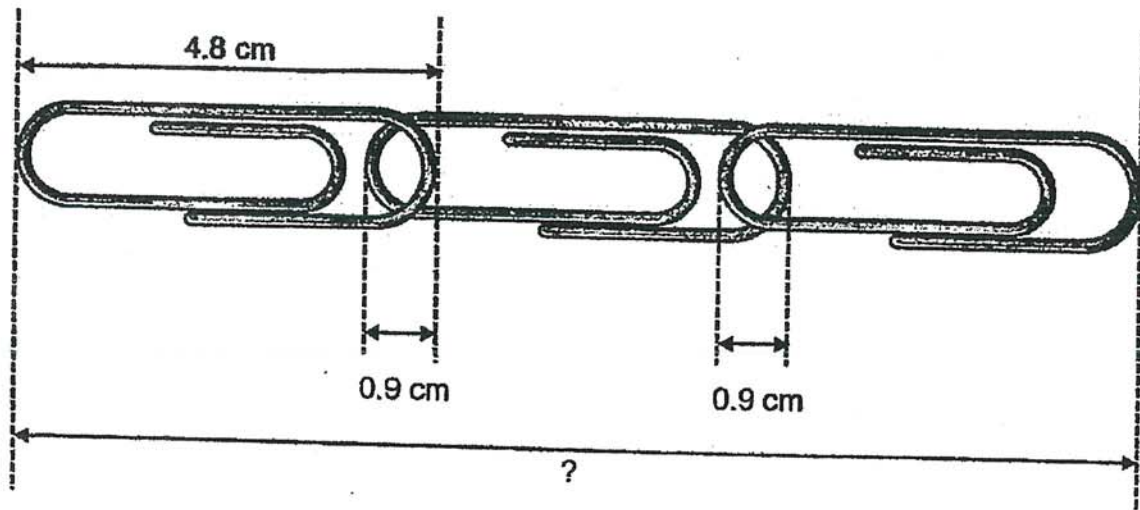


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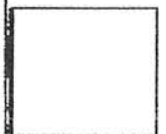


25. The figure below shows three similar paper clips being chained together. What is the total length of the figure?

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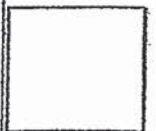
Ans : _____ cm



26. A tank is $\frac{1}{2}$ filled with water. When 1536 ml of water is poured out, the tank becomes $\frac{1}{8}$ filled. How much water is there in the tank when it is $\frac{1}{2}$ filled?

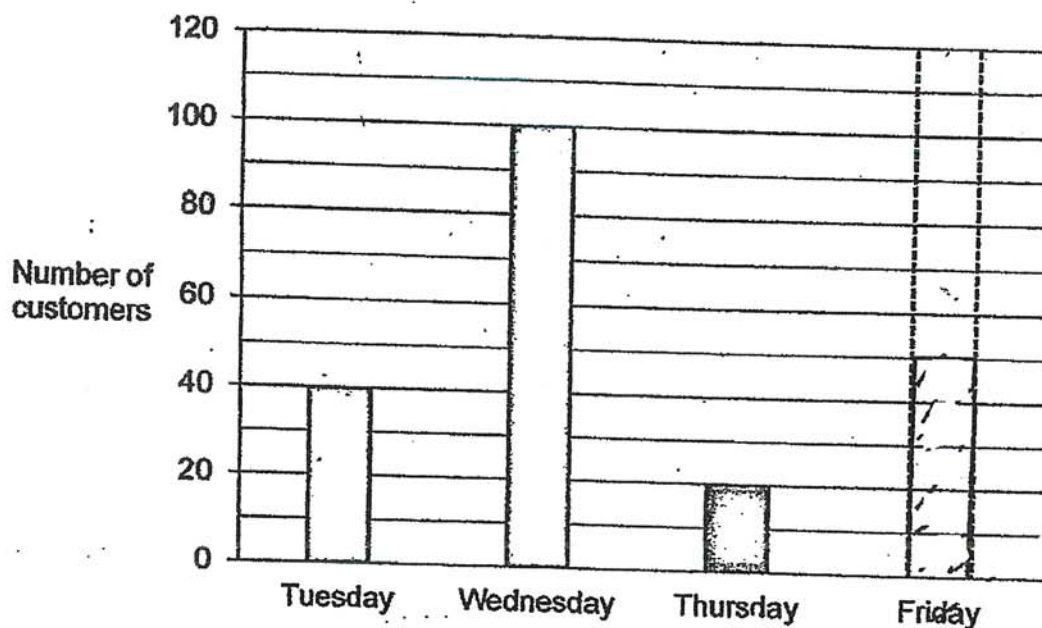
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Ans : _____



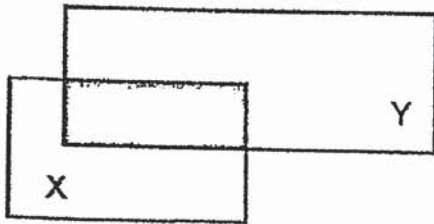
27. The bar graph below shows the number of customers at a supermarket from Tuesday to Thursday. The total number of customers on Thursday and Friday was equal to the average number of customers on Tuesday and Wednesday. How many customers were at the supermarket on Friday? Draw the bar in the graph.

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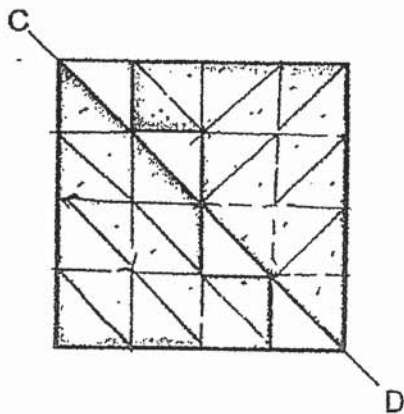
28. In the figure below, Rectangle X overlaps Rectangle Y. The ratio of the area of Rectangle X to the area of the shaded part to the area of Rectangle Y is $8 : 3 : 12$. The area of Rectangle X is 120 cm^2 . What is the area of the unshaded part in Rectangle Y?

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Ans : _____ cm^2

29. The figure below shows a square with 4 identical right-angled triangles along the line CD. What fraction of the figure is the shaded part? Leave your answer in the simplest form.



Ans : _____



30. Elix wrote a whole number and listed all the factors. The number that she had written has exactly six factors. Two of the factors are 3 and 9.

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Each statement below is either True, False or Not possible to tell. For each statement, put a tick (✓) in the correct column.

| Statement | True | False | Not possible to tell |
|---|------|-------|----------------------|
| The smallest possible number that Elix had written was 18. | | | |
| The sum of all the factors of the number written by Elix is 30. | | | |

End of Booklet B

Name: _____ ()

Class: Primary 5 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL (PRIMARY)



**Primary 5 Mathematics
2020 End - Year Assessment**

Paper 2

27 October 2020

| | |
|-------------|-----|
| Paper 1 | 45 |
| Paper 2 | 55 |
| Total Marks | 100 |

Parent's/Guardian's Signature

Time : 1 hour 30 minutes

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.

Follow all instructions carefully.

Answer all questions.

Write your answers in this booklet

The use of an approved calculator is expected, where appropriate.

This booklet consists of 16 printed pages.

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)

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1. Jee Bin baked fruit cakes and cheese cakes. $\frac{4}{11}$ of the cakes were fruit cakes. 308 of them were cheese cakes. How many cakes did he bake altogether?

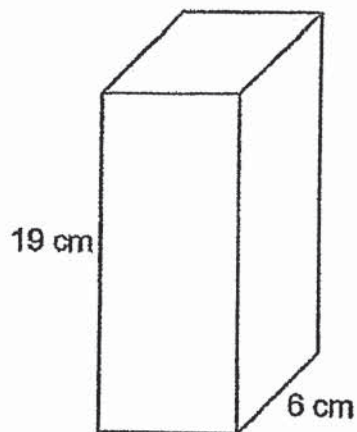
Ans : _____

2. There were some cones and 106 hula hoops in a PE storeroom. 22 cones were damaged and thrown away. Then the ratio of the number of hula hoops to the number of cones was 2 : 1. How many cones were there in the storeroom at first?

Ans : _____

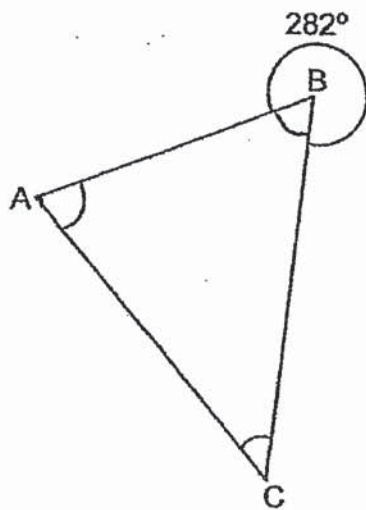


3. A cuboid of height 19 cm has a square base of side 6 cm. What is its volume?



Ans : _____ cm^3

4. The figure below shows a triangle ABC. $\angle ABC = 282^\circ$. Find the sum of $\angle BAC$ and $\angle BCA$.



Ans : _____

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5. At first, the average amount of water in two pails A and B was 471 cm^3 . Some water was poured into B. Then the average amount of water in A and B became 976 cm^3 . How much water was poured into B?

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Ans : _____ cm^3

For questions 6 to 17, show your working clearly and write your answers in the spaces provided. The number of marks available is shown in the brackets **SP** at the end of each question or part-question. (45 marks)

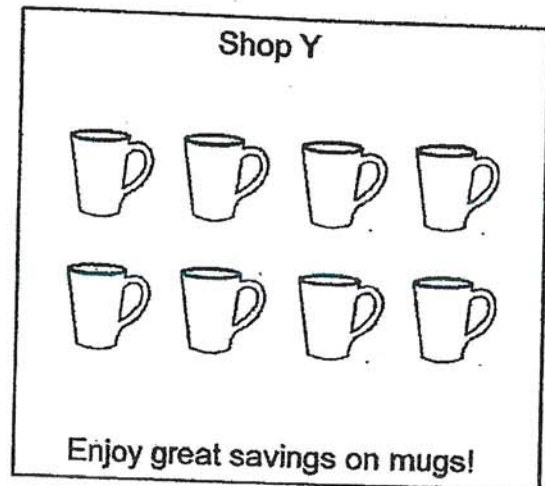
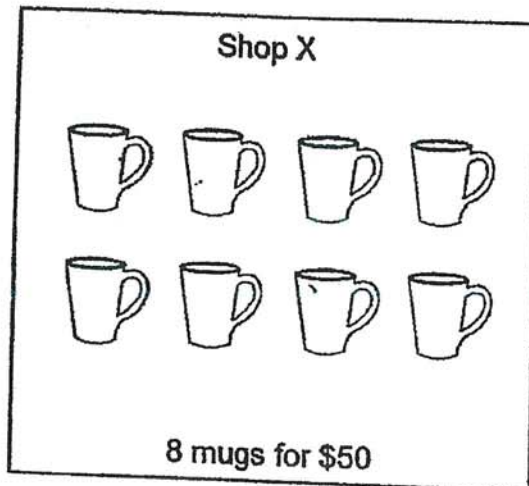
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6. The mass of a stapler is $\frac{1}{6}$ of the total mass of 1 such stapler and 10 identical erasers. The total mass of 3 such staplers and 20 such erasers is 1560 g. What is the mass of 1 such stapler?

Ans : _____ [3]

7. Shop X and Shop Y sold the same type of mugs shown below. Mrs Ota planned to buy 32 such mugs from Shop X. She changed her mind and bought the same type of mugs at a lower price from Shop Y. She saved \$40 on the same number of mugs. How much did she pay for each mug?

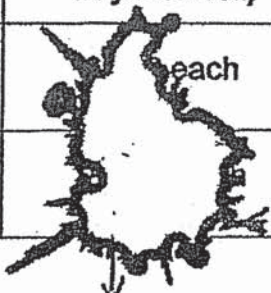

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Ans : _____ [3]

8. The table below shows the price of tickets to watch a puppet show. The weekday price and the weekend price of a child's ticket is smudged with ink. A child's ticket costs \$7.80 less on a weekday than on a weekend.

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| | Adults | Senior Citizens (65 years and above) | Children (3 years old to 12 years old) |
|----------|--------------|--|--|
| Weekdays | \$11.50 each | \$8.50 each |  each |
| Weekends | \$24.00 each | \$18.00 each |  each |

\$14.60

Last Saturday, Mrs Pong went to watch the puppet show with her 70-year-old father and her 8-year-old daughter. She paid a total amount of \$56.60 for the tickets.

If the family were to watch the show on a Thursday, how much would Mrs Pong pay for her daughter's ticket?

Ans : _____ [3]

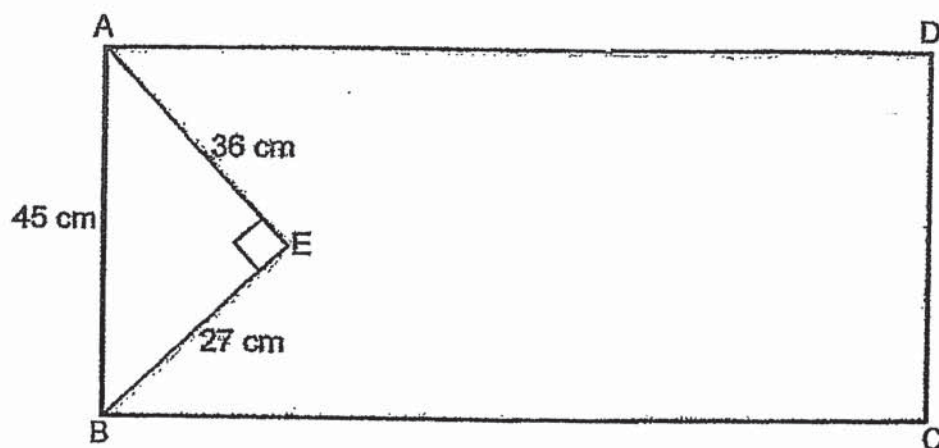
9. At Shinee Sparkle Store, the usual price of a necklace was \$1290. During a sale, Laurice bought the necklace at a discount of 38%. As Laurice was a member of the store, she was given an additional \$15 discount off the price of the necklace after the 38% discount. How much did Laurice pay for the necklace in the end?

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Ans : _____ [3]

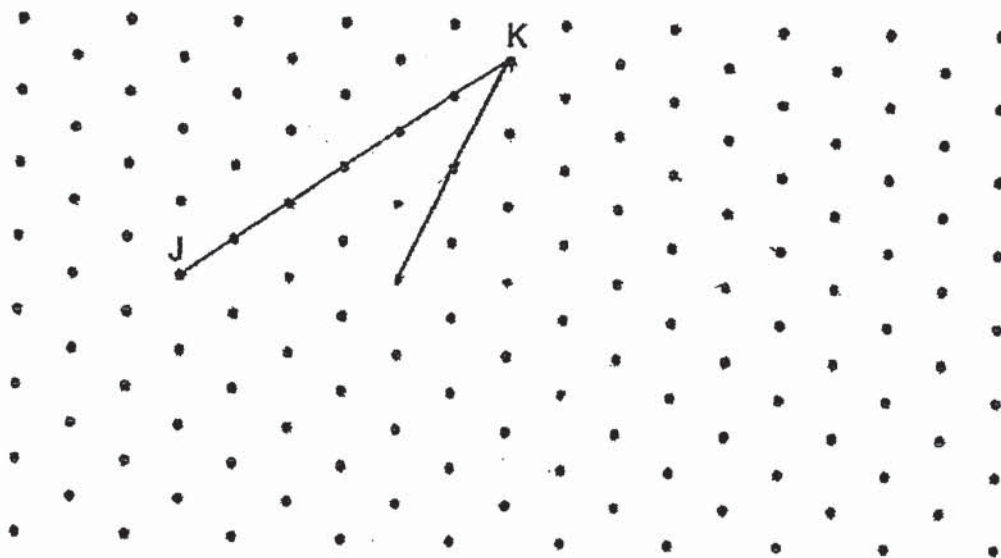
10. In the figure below, ABCD is a rectangle and ABE is a right-angled triangle with sides measuring 27 cm, 36 cm and 45 cm. The perimeter of the shaded part is 3.08 m. What is the area of the shaded part?

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Ans : _____ [3]

11. In the grid below, JK is one side of an isosceles triangle.



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- (a) Draw and complete triangle JKL from the given line JK.
Label the triangle JKL. [2]
- (b) From K, draw a line to divide triangle JKL into two triangles of a different area. [1]

12. A group of women and men took part in a quiz that consisted of two rounds.

$\frac{3}{5}$ of the women and $\frac{2}{3}$ of the men were not selected for the 2nd round.

A total of 900 women and men were not selected for the 2nd round.

The number of women who were not selected was the same as the number of men who were not selected.

(a) Were there more women or more men who were selected for the 2nd round?

(b) Find the total number of women and men who took part in the quiz.

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Ans : (a) More _____ [2]

(b) _____ [2]

13. Spencer, Nigel and Greta shared the cost of a massage chair for their mother.

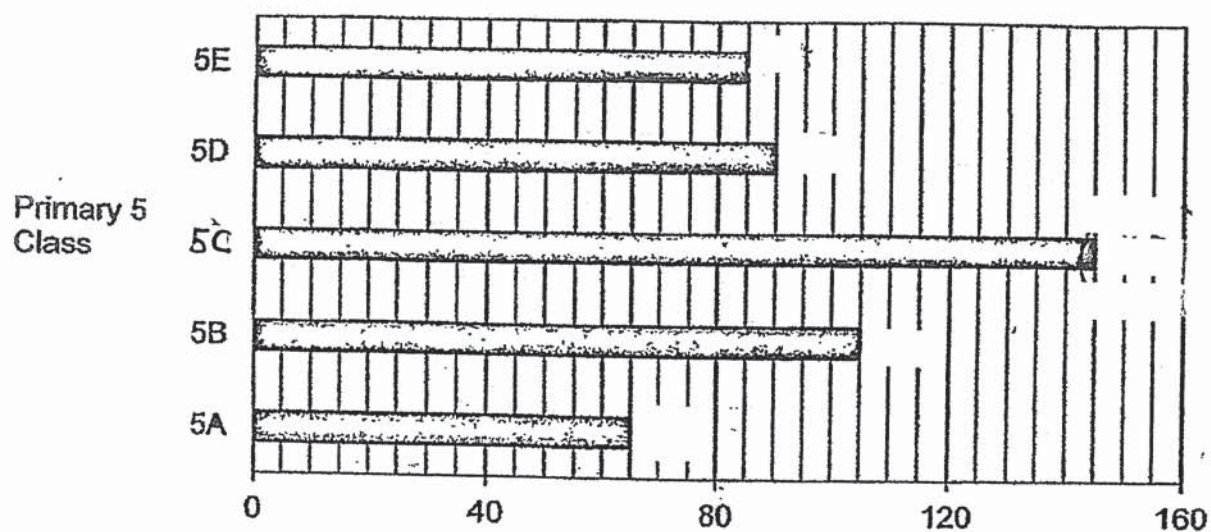
Spencer paid $\frac{2}{9}$ of the total cost of the massage chair. Nigel paid $\frac{5}{8}$ of what Spencer paid. Altogether, Spencer and Nigel paid \$793. How much did Greta pay for the massage chair?

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Ans : _____ [4]

14. The bar graph below shows the number of reusable masks donated by five Primary 5 classes to a children's home. Every pupil in each class donated either 2 masks or 3 masks.

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- (a) Which class donated the number of masks that was closest to the average number of masks donated by all the five classes?
- (b) There are 38 pupils in Primary 5E. Some of them donated 3 masks each. How many pupils donated 2 masks each?

Ans : (a) _____ [1]

(b) _____ [3]

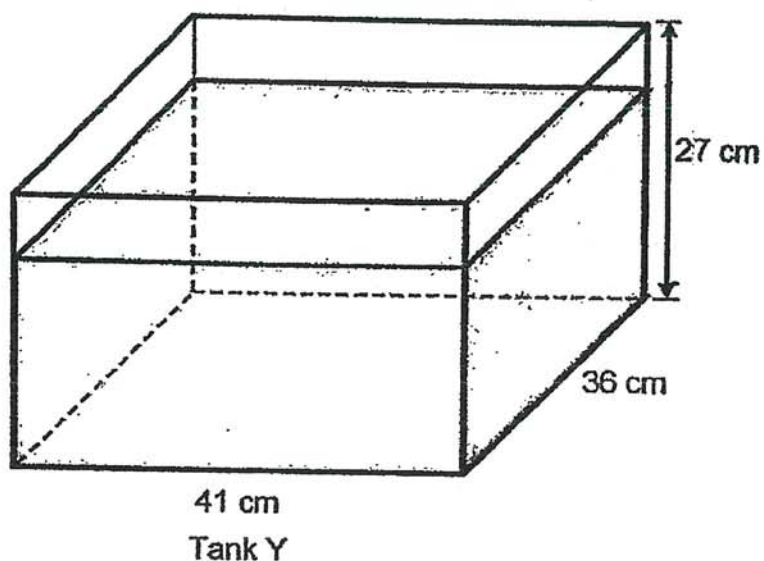
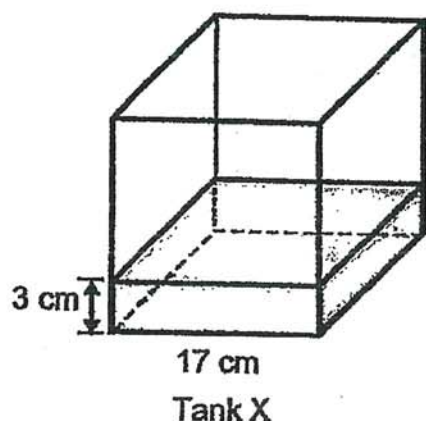
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15. A cubical tank, Tank X of edge 17 cm was filled with water up to a height of 3 cm. A rectangular tank, Tank Y measuring 41 cm by 36 cm by 27 cm, was also filled with some water. The water level in Tank Y was the same as the height of Tank X.

(a) What was the volume of water in Tank X at first?

(b) All the water from Tank X was then poured into Tank Y without any spilling.

How much more water had to be poured into Tank Y so that the water level was 2 cm from the top?



Ans : (a) _____ [1]

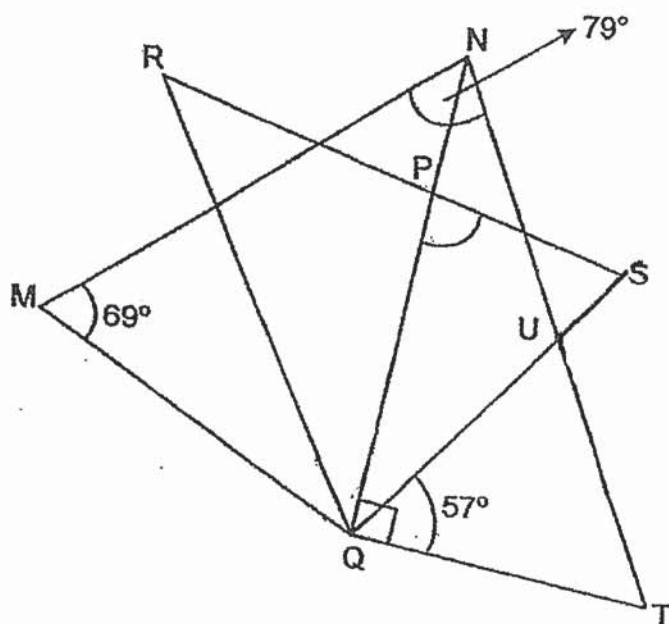
(b) _____ [4]

16. In the figure below, MNQ and QRS are two identical isosceles triangles. $NM = NQ$ and $RQ = RS$. $\angle QMN = 69^\circ$, $\angle SQT = 57^\circ$ and $\angle MNT = 79^\circ$.

(a) Find $\angle QPS$.

(b) Find $\angle TUS$.

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Ans : (a) _____ [3]
(b) _____ [2]

17. At first, there were some girls in the hall. $\frac{7}{10}$ of the girls left the hall. After some time, $\frac{1}{5}$ of the remaining girls left the hall.

- (a) What fraction of the girls remained in the hall in the end?
(b) After recess, 352 girls entered the hall. Then the total number of girls in the hall was twice the total number of girls in the hall at first. How many girls were there in the hall at first?

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Ans : (a) _____ [1]

(b) _____ [4]

End of Paper

ANSWER KEY

YEAR : 2020

LEVEL : PRIMARY 5

SCHOOL : CHIJ ST NICHOLAS GIRLS' SCHOOL

SUBJECT : MATHEMATICS

TERM : SA2

BOOKLET A

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

BOOKLET B

Q16. 6

17. $160 \div 4 \times 5 + 16$

$= 40 \times 5 + 16$

$= 200 + 16$

$= 216$

Q18. $\frac{3}{4} \times 20 = 15$

Q19. $56 \div 100 = 0.56$

$0.56 \times 7 = \$3.92$

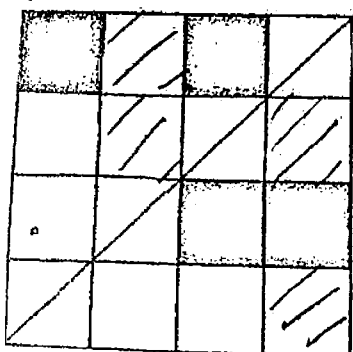
Q20. ~~$330 \div 11 = \$30$~~ $330 \div 30 = 11$

Q21. $1.9, \frac{9}{5}, 1\frac{1}{4}, \frac{11}{10}$

Q22. $3 \times 4 \times 5 = 60$

Q23. $180^\circ - 99^\circ - 67^\circ = 14^\circ$

Q24.



Q25. $4.8 - 0.9 - 0.9 = 3$

$4.8 + 4.8 + 3 = 12.6$

Q26. $\frac{1}{2} - \frac{1}{8} = \frac{3}{8}$

$1536 \div 3 = 512$

$512 \times 4 = 2048 \rightsquigarrow 2.048$

Q27. $100+40=140$

$140 \div 2 = 70$

$70-20=50$

Q28. $120 \div 8 = 15$

$15 \times 9 = 135$

Q29. $\frac{4}{32} = \frac{1}{8}$

$1 - \frac{1}{8} = \frac{7}{8}$

Q30.

| Statement | True | False | Not possible to tell |
|---|------|-------|----------------------|
| The smallest possible number that Elix had was 18 | ✓ | | |
| The sum of all the factors of the number written by Elix is 30. | | ✓ | |

PAPER 2

Q1. $1 - \frac{4}{11} = \frac{7}{11}$

$308 \div 7 = 44$

$44 \times 11 = 484$

Q2. $106 \div 2 = 53$

$53 + 22 = 75$

Q3. $6 \times 6 \times 19 = 684$

Q4. $360^\circ - 282^\circ = 78^\circ$

$180^\circ - 78^\circ = 102^\circ$

Q5. $471 \times 2 = 942$

$976 \times 2 = 1952$

$1952 - 942 = 1010$

Q6. $1560 \div 13 = 120$

Q7. $32 \div 8 = 4$

$50 \times 4 = 200$

$200 - 40 = 160$

$160 \div 32 = 5$

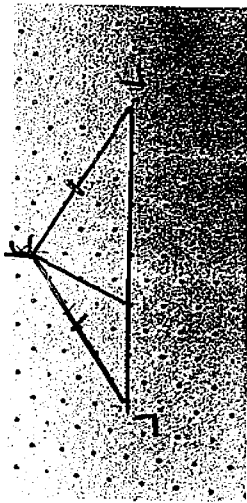
Q8. $56.60 - 24 - 18 = \$14.60$

$\$14.60 - 7.80 = \6.80

Q9. $\$1290 \div 100 = \12.90
 $\$12.90 \times 38 = \490.20
 $\$1290 - \$490.20 = \$799.80$
 $\$799.80 - \$15 = \$784.80$

Q10. $3.08\text{m} = 308\text{cm}$
 $(308 - 36 - 27 - 45) \div 2 = 11$
 $\frac{1}{2} \times 27 \times 36 = 486$
 $100 \times 45 = 4500$
 $4500 - 486 = 4014$

Q11.



Q12.

a) $900 \div 2 = 450$

| Women | Men |
|----------------------|--------------------|
| $450 \div 3 = 150$ | $450 \div 2 = 225$ |
| $150 \times 2 = 300$ | |

Ans : women

b) $900 + 300 + 225 = 1425$

Q13. $\frac{5}{8} \times \frac{2}{9} = \frac{5}{36}$

$1 - \frac{2}{9} - \frac{5}{36} = \frac{23}{36}$

$\frac{2}{9} + \frac{5}{36} = \frac{13}{36}$

$\$793 \div 13 = 61$

$\$61 \times 23 = 1403$

Q14. $(65 + 105 + 145 + 90 + 85) \div 5 = 98$ (5 B) (a)

$38 \times 2 = 76$

$85 - 76 = 9$

$9 \div 1 = 9$ (b)

Q15. $17 \times 17 \times 3 = 867$ (a)

$41 \times 36 \times 17 = 25092$

$$25092+867=25959$$

$$27-2=25$$

$$41 \times 36 \times 25 = 36900$$

$$36900 - 25959 = 10941 \text{ (b)}$$

$$\text{Q16. } 90^\circ - 57^\circ = 33^\circ$$

$$180^\circ - 33^\circ - 69^\circ = 78^\circ \text{ (a)}$$

$$180^\circ - 69^\circ - 69^\circ = 42^\circ$$

$$79^\circ - 42^\circ = 37^\circ$$

$$180^\circ - 33^\circ - 37^\circ = 110^\circ \text{ (b)}$$

$$\text{Q17. } \frac{12}{50} = \frac{6}{25} \text{ (a)}$$

$$50 \times 2 = 100$$

$$100 - 12 = 88$$

$$352 \div 8 = 4$$

$$4 \times 50 = 200 \text{ (b)}$$

4

END