SA1

Name: _____ ( )

Class: Primary 6 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL (PRIMARY)

Primary 6 Mathematics

2021 Mid-Year Assessment

Paper 1

Booklet A

7 May 2021

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 5 ten thousands + 7 thousands + 18 tens = _____

(1) 5718

(2) 50 718

(3) 57 018

(4) 57 180

2 What is the sum of all the factors of 15?

(1) 9

(2) 16

(3) 23

(4) 24

3 Mr Chan wanted to buy 4 shirts at $\$m$ each. He was short of \$12. How much money did Mr Chan have?

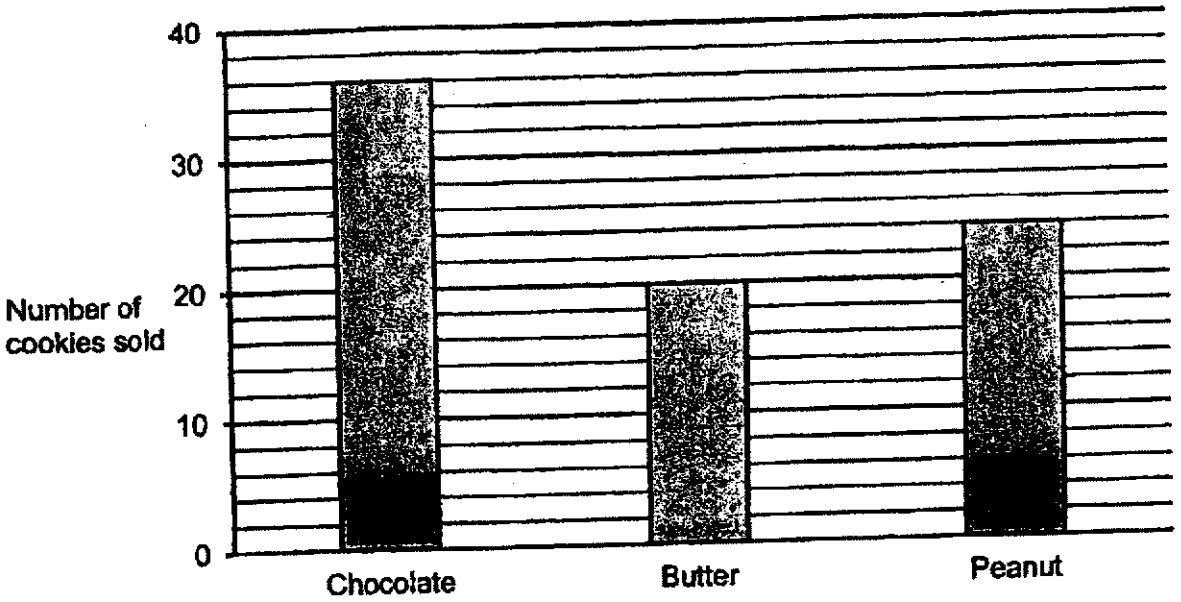
(1) $\$(4m + 12)$

(2) $\$(4m - 12)$

(3) $\$(12m + 4)$

(4) $\$(12m - 4)$

4 The graph below shows the number of cookies sold by Awesome Bakery on Monday.



Each cookie cost $2. How much money did Awesome Bakery collect on Monday?

(1) $160

(2) $156

(3) $150

(4) $80

5 When 34.076 is multiplied by 100, what does the digit 7 in the answer stand for?

(1) 7 ones

(2) 7 tens

(3) 7 tenths

(4) 7 hundredths

6 William made honey lemon drink for a party. He mixed honey and lemon juice in the ratio 1 : 4. He used 600 ml of honey. How much lemon juice did he use?

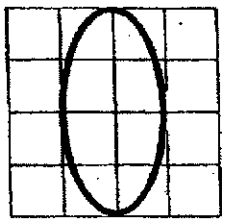
(1) 150 ml

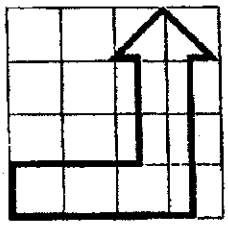
(2) 480 ml

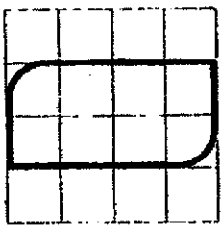
(3) 2400 ml

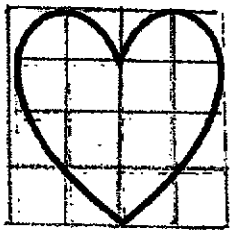
(4) 3000 ml

7 Which one of the following shapes has only one line of symmetry?

(1) 

(2) 

(3) 

(4) 

8 Express 1.7 as a percentage.

(1) 0.017%

(2) 0.17%

(3) 17%

(4) 170%

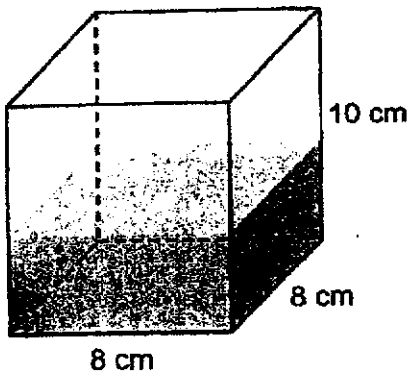
9 A rectangular tank with a square base of side 8 cm and a height of 10 cm is $\frac{3}{8}$ filled with water. Find the volume of the water in the tank.

(1) 240 ml

(2) 400 ml

(3) 500 ml

(4) 640 ml



10 The opening hours of Good Health Clinic are shown below.

Monday to Friday:
8.30 a.m. – 12.30 p.m.
2.00 p.m. – 5.00 p.m.
7.30 p.m. – 9.00 p.m.
Saturday:
8.30 a.m. – 12.30 p.m.
Sunday and Public Holidays:
Closed

How long is the clinic open on a Wednesday?

(1) 10 h 30 min

(2) 9 h 30 min

(3) 8 h 30 min

(4) 7 h 30 min

11 Mrs Ong is 36 years older than Pauline. This year, Mrs Ong is four times of Pauline's age. How old is Pauline in 5 years' time?

(1) 9

(2) 12

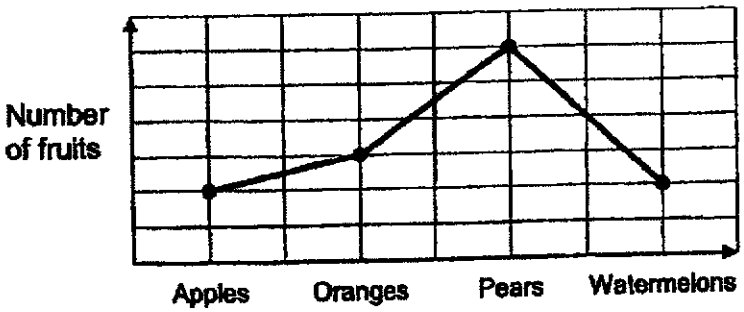
(3) 14

(4) 17

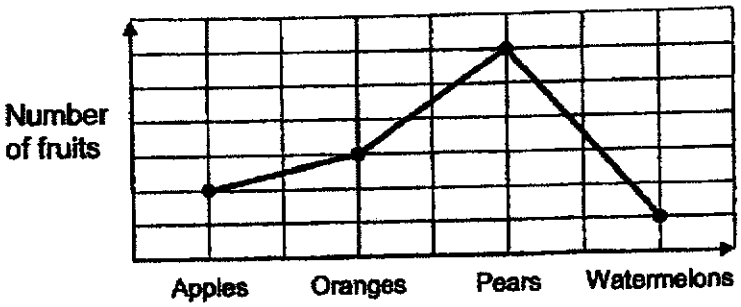
12 Mrs Tan bought 4 types of fruits. The number of apples was $\frac{2}{3}$ the number of oranges. The ratio of the number of pears to the number of oranges was 2 : 1. Mrs Tan bought the least number of watermelons.

Which one of the following line graphs represents the information above?

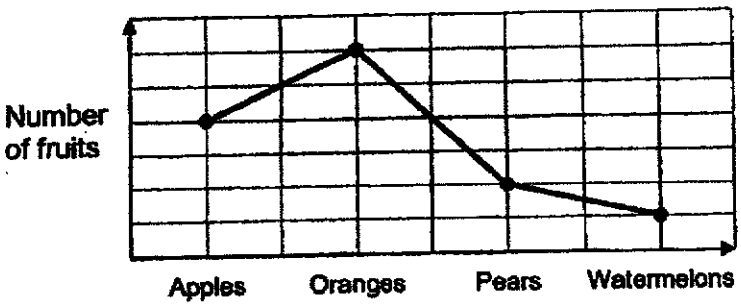
(1)



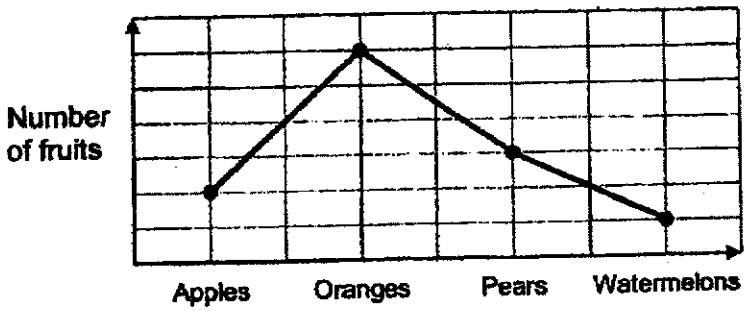
(2)



(3)



(4)



13 At a sports carnival, there are twice as many adults as children. $\frac{7}{9}$ of the children are girls. What is the ratio of the number of girls to the number of boys to the number of adults?

(1) 2 : 7 : 9

(2) 2 : 7 : 18

(3) 7 : 2 : 9

(4) 7 : 2 : 18

14 At first, Xavier and Ya Ling were each facing a different direction. Xavier was facing West at first. After Xavier made a $\frac{3}{4}$ - turn in a clockwise direction and Ya Ling turned 135° anti-clockwise, both of them faced the same direction. What direction was Ya Ling facing at first?

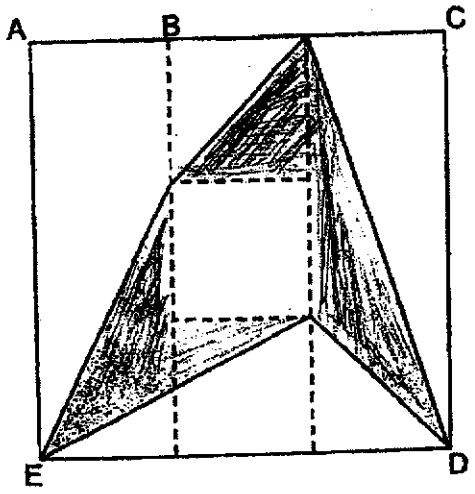
(1) North-East

(2) North-West

(3) South-East

(4) South-West

15 Figure ACDE is made up of 2 identical rectangles and 3 identical squares. The length of AE is 3 times the length of AB. What fraction of Figure ACDE is shaded?



(1) $\frac{1}{3}$

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

(3) $\frac{7}{18}$

(4) $\frac{11}{18}$

Name: _____ ( )

Class: Primary 6 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL (PRIMARY)

Primary 6 Mathematics

2021 Mid-Year Assessment

Paper 1

Booklet B

7 May 2021

Booklet A	/20
Booklet B	/25
Total (Paper 1)	/45

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 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)

Do not write in this space

16. Simplify $8n + 9 - 3n - 5$.

Ans: _____

17. Find the value $\frac{2}{7} + \frac{6}{10}$.

Give your answer as a fraction in the simplest from

Ans: _____

18. Express $5\frac{13}{200}$ as a decimal.

Ans: _____

MARKS: ☐

19. Muthu bought some red and purple balloons. For every 1 red balloon bought. he bought 7 purple balloons. Muthu bought a total of 56 balloons. How many red balloons did he buy?

Do not write in this space

Ans: _____

20. 50 children were at camp. There were 18 girls. What percentage of the children were boys?

Ans: _____ %

3 MARKS:

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. (20 marks)

Do not write in this space

21. Ken had 170 more stamps than Luke at first. Ken gave 37 stamps to Luke. How many more stamps did Ken have than Luke in the end?

Ans: _____

22. The table show the postage rates for mailing letters between Singapore and Malaysia.

Mass Step Not Over	Postage Rate
50g	$0.90
100g	$1.40
Per additional step of 10 g or part thereof	$0.10
Registered service	$4.20

Ming En wants to send a registered letter weighing 125 g to Malaysia. How much does she need to pay?

Ans: $_____

Marks: [ ]

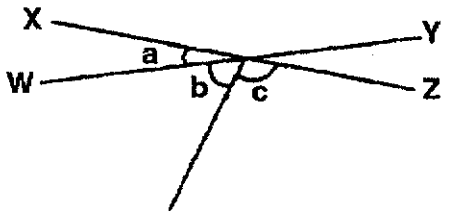
Do not write in this space

23. Find the value of 7.07 + 5. Correct your answer to 1 decimal place

Ans: _____

24. WY and XZ are straight lines. $\angle c$ is twice of $\angle b$. $\angle a = 24°$.

Find $\angle c$.



Ans: _____

MARKS: [ ]

Do not write in this space

25. Mrs Lim wants to give some biscuits to her pupils. If each pupil receives 4 biscuits. she will have 39 biscuits left. If each pupil receives7 biscuits, she will need 6 more biscuits. How many pupils are there?

Ans: _____

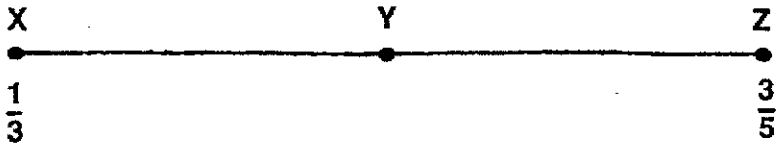
26. In February, the average temperature increased by 2°C as compared to January. This was a 10% increase.What was the average temperature in February?

Ans: _____ °C

MARKS: [ ]

Do not write in this space

27. In the number line below, X represents $\frac{1}{3}$, Z represents $\frac{3}{5}$ and XY = YZ. What fraction is represented by Y?



Ans: _____

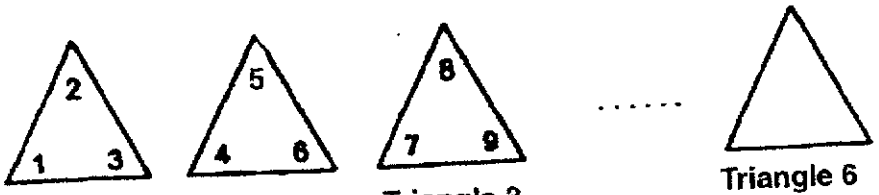
28. Wei Ming had $\frac{1}{4}$ as many blue marbles as green marbles at first. After he bought 12 blue marbles and gave away 12 green marbles, the ratio of the number of blue marbles in the end to the number of green marbles in the end was 1:2. How many marbles did Wei Ming altogetter in the end?

Ans: _____

MARKS: ☐

Do not write in this space

29. The numbers in each triangle from a pattern as shown below.

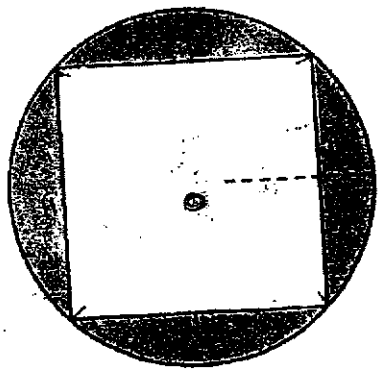


Triangle 1 Triangle 2 Triangle 3 Triangle 6

What is the sum of the 3 numbers in Triangle 6?

Ans: _____

30. The figure below is made up of a square and a circle. O is the centre of the circle. The diameter of the circle is 14 cm. Find the shaded area. (Take $\pi = \frac{22}{7}$)



Ans: _____ cm^2

End of Paper

MARKS: ☐

Name: _____.( )

Class: Primary 6 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL (PRIMARY)

Primary 6 Mathematics

2021 Mid-Year Assessment

Paper 2

7 May 2021

Paper 1	45
Paper 2	55
Total Marks	100

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)

Do not write in this space

1. Mindy and Nathan have $274 altogether. Mindy has $15 more than Nathan. How much money does Nathan have?

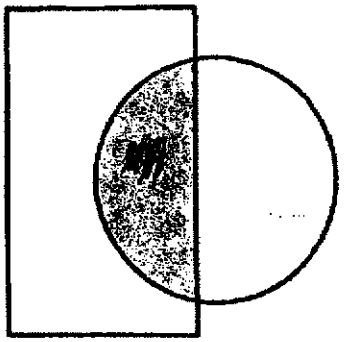
Ans : $ _____

2. Colina had 1962 cookies. She packed them in packets of 30 cookies each. How many cookies were left unpacked?

Ans : _____

Do not write in this space

3. The figure is made up of a rectangle and a circle that overlaps. The ratio of the shaded area of the rectangle to the unshaded area of the rectangle is 3 : 5. The ratio of the shaded area of the circle to the unshaded area of the circle is 5 : 7. What is the ratio of the shaded area to the area of the whole figure? Express the ratio in its simplest form.



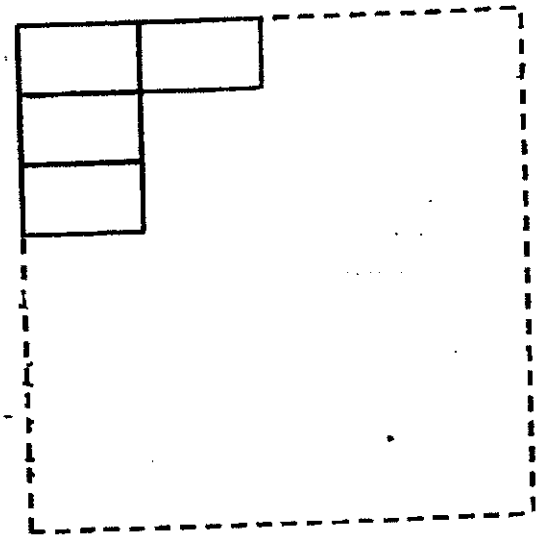
Ans : _____

4. Mrs Henderson bought $\frac{9}{10}$ kg of flour, She gave $\frac{2}{5}$ of the flour to her neighbour and used $\frac{1}{4}$ kg of the flour to bake a cake. How much flour did she have left?

Ans : _____ kg

Do not write in this space

5. Shi Qi uses some rectangular cards, each measuring 14 cm by 8 cm, to form a bigger square without overlapping. What is the least number of rectangular cards needed to form the bigger square?



Ans : _____

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 ( ) at the end of each question or part-question. (45 marks)

Do not write in this space

6. The table below shows Helina's marks for the following subjects.

Subject	Marks
English	90
Chinese	82
Mathematics	?
Science	88

If she wants to get an average of 85 marks for all the four subjects, what is the lowest mark she must get for Mathematics?

Ans : _____ [3]

7. Mrs Rango has some twenty-cent coins and fifty-cent coins. $\frac{2}{5}$ of the coins are twenty-cent coins. She has a total amount of $7.60. How many coins does she have altogether?

Do not write in this space

Ans : _____ [3]

8. Figure A is an equilateral triangle and Figure B is a square. The length of each side of Figure A is $\frac{4}{5}$ the length of each side of Figure B. The total perimeter of both figures is 128 cm. Find the perimeter of Figure A. Express your answer as a decimal in metres.

Do not write in this space

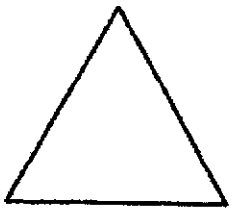


Figure A

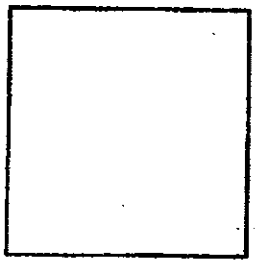
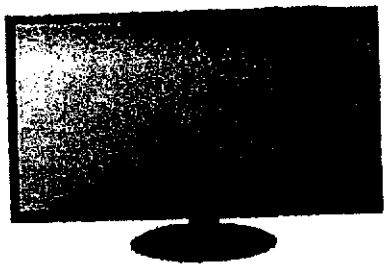


Figure B

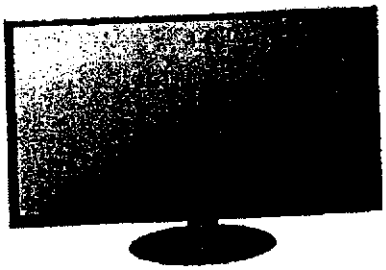
Ans : _____ [3]

Do not write in this space

9. Store A and Store B were having a promotion sale for the same type of television set as shown below.



Store A
Usual price: $1200
30% discount



Store B
After discount: $1080

(a) How much was the discount for the television set offered at Store A?

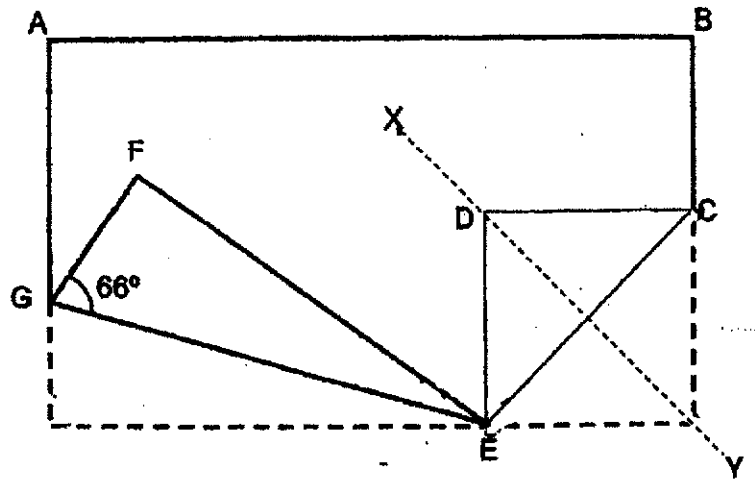
(b) Store B offered the same amount of discount as Store A for the television set. What was the percentage discount offered by Store B?

Ans : (a) _____ [1]

(b) _____ [2]

10. The figure below shows a rectangular piece of paper folded as shown. CD = DE. ∠FGE = 66°.

Do not write in this space



(a) Find ∠DEF.

Ans : _____ [2]

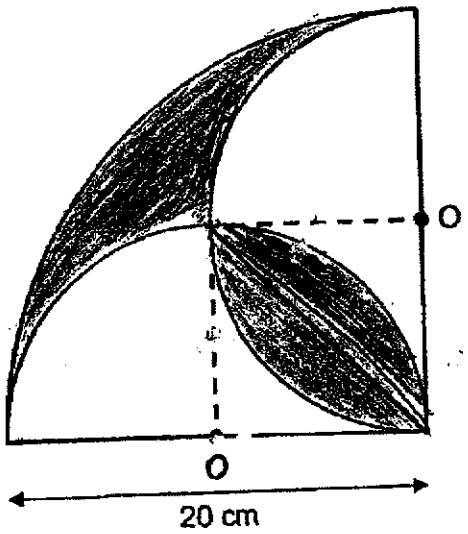
(b) Each of the statements below is either true, false or not possible to tell from the information given. For each statement, put a tick (✓) in the correct column.

Statement	True	False	Not possible to tell
CDE is an equilateral triangle.			
Line XY cuts Triangle CDE into 2 triangles of the same size			

[1]

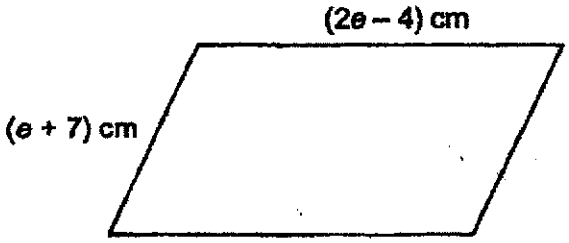
11. The figure below is made up of a big quarter circle and 2 identical semicircles. The radius of the big quarter circle is 20 cm. O is the centre of each semicircle. Find the total area of the shaded parts. (Take $\pi = 3.14$)

Do not write in this space



Ans : _____ [3]

12. Jie Kai had 250 cm of wire. He used some of it to form a parallelogram as shown below.



(a) How much wire did Jie Kai use to form the parallelogram? Leave your answer in terms of e.

(b) If $e = 13$, what fraction of the wire did he have left after forming the parallelogram? Leave your ~~answer in~~ the simplest form.
answer in the

Do not write in this space

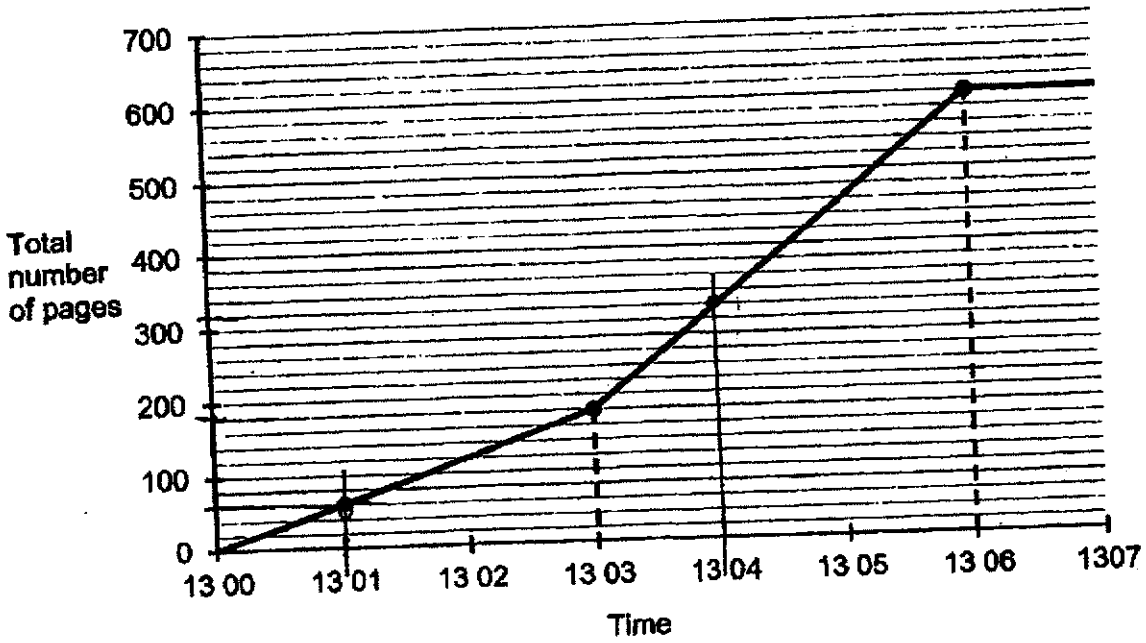
Ans : (a) _____ [2]

(b) _____ [2]

13. Mr Ling used two machines with different printing rate to print a total number of 600 pages. He started Machine A at 13 00 and Machine B three minutes later. He finished his printing job at 13 06.

Do not write in this space

The graph below shows the total number of pages printed by both machines.



(a) How many pages did Machine A print in one minute?

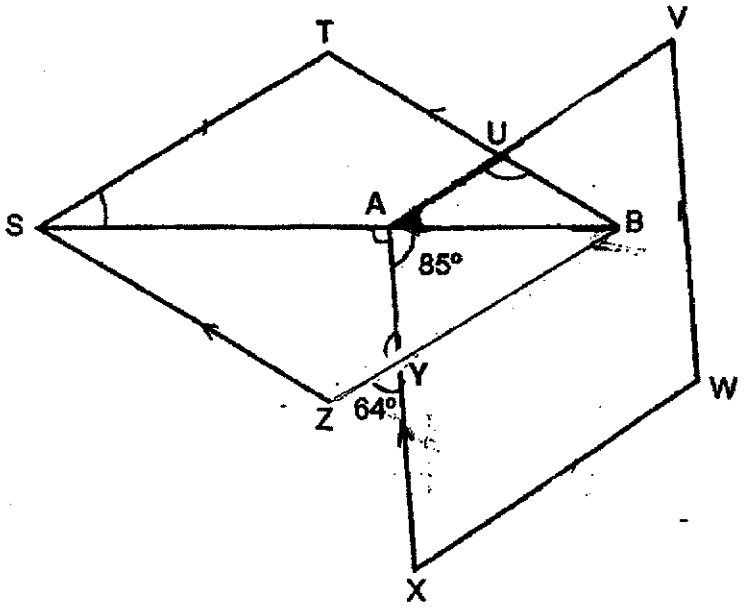
(b) How many pages did Machine B print in one minute?

Ans : (a) _____ [1]

(b) _____ [3]

14. The figure below is made up of 2 identical rhombuses. SAB is a straight line.

Do not write in this space



(a) Find ∠AUB.

Ans : _____ [3]

(b) *Circle the words that describe AUB correctly in the following statement.*

AUB (**is / is not**) an isosceles triangle because
∠UAB (**is / is not**) equal to ∠UBA.

[1]

15. Ana, Baha and Chu En bought some pens. Ana bought three times as many pens as Baha. Baha bought four times as many pens as Chu En. After Ana gave half of her pens to Chu En and Baha bought another 120 pens, Baha had twice as many pens as Chu En.

(a) How many pens did Baha have in the end?

(b) How many more pens must Chu En buy so that she could have the same number of pens as Baha in the end?

Do not write in this space

Ans : (a) _____ [4]

(b) _____ [1]

16. Mrs Koh used $\frac{4}{9}$ of her money to buy some books and 12 files. She used $\frac{2}{3}$ of the remaining money to buy 30 files. The cost of 1 book was the same as the total cost of 8 files.

Do not write in this space

(a) With the amount of money Mrs Koh had left, how many more files could she buy?

(b) How many books did Mrs Koh buy?

Ans : (a) _____ [1]

(b) _____ [4]

17. Some children were at an exhibition at first. The ratio of the number of girls to the number of boys was 2 : 1. After $\frac{3}{4}$ of the girls and 12 boys left the exhibition, the ratio of the number of children who remained at the exhibition to the total number of children at first was 1 : 4.

Do not write in this space

(a) How many boys were at the exhibition at first?

(b) How many children were at the exhibition altogether at first?

Ans : (a) _____ [4]

(b) _____ [1]

End of Paper

ANSWER KEY

YEAR : 2021
LEVEL : PRIMARY 6
SCHOOL : CHIJ ST NICHOLAS
SUBJECT : MATHEMATICS
TERM : MID-YEAR EXAM

BOOKLET A (PAPER 1)

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

BOOKLET B (PAPER 1)

Q16	$8n - 3n + 9 - 5 = 5n + 4$	Q17	$\frac{2}{7} \times \frac{10}{6} = \frac{10}{21}$
Q18	5.065	Q19	$1 + 7 = 8$ $56 \div 8 = 7$
Q20	100% - 750 $1\% \rightarrow 50 \div 1000 = 0.50$ 100% - 36% = 64%	Q21	$133 - 37 = 96$
Q22	$\$0.10 \times 3 = \$0.30$ $\$1.40 + \$0.30 = \$1.70$ $\$4.20 + \$1.70 = \$5.90$	Q23	$7.07 \div 5 = 1.41 \approx 1.4$
Q24	$180° - 24° = 156°$ 3 units = 156 1 unit = $156 \div 3 = 52$ $52 \times 2 = 104°$	Q25	$7 - 4 = 3$ $39 + 6 = 45$ $45 \div 3 = 15$
Q26	$10\% \rightarrow 2$ $100\% \rightarrow 2 \times 10 = 20$ $110\% \rightarrow 20 + 2 = 22°c$	Q27	$\frac{3}{5} + \frac{1}{3} = \frac{9}{15} + \frac{5}{15} = \frac{14}{15}$ $\frac{14}{15} \div 2 = \frac{14}{15} \times \frac{1}{2} = \frac{14}{30} = \frac{7}{15}$
Q28	$5 - 3 = 2$ 2 units = 12 1 units = $12 \div 2 = 6$ $6 \times 15 = 90$	Q29	$4 \rightarrow 10, 11, 12$ $5 \rightarrow 13, 14, 15$ $6 \rightarrow 16, 17, 18$ $16 + 17 + 18 = 51$
Q30	Area of circle $= \frac{22}{7} \times \frac{7}{1} \times \frac{7}{1} = 154$ $\frac{1}{2} \times \frac{14}{1} \times \frac{7}{1} = 49$ $49 \times 2 = 98$ $154 - 98 = 56cm2$		

PAPER 2

Q1	274 – 15 = 259 259 ÷ 2 = $129.50	Q2	1962 ÷ 30 = 65R12 ANS : 12
Q3	B : A + B + C 15:61	Q4	$\frac{3}{5} \times \frac{9}{10} = \frac{27}{50}$ $\frac{27}{50} - \frac{1}{4} = \frac{29}{100}$kg
Q5	14 x 8 = 112 14 x 4 = 56 8 x 8 = 64 64 x 56 = 3584 112 x 4 = 448 3584 – 448 = 3136 3136 ÷ 112 = 28	Q6	85 x 4 = 340 90 + 82 + 88 = 260 340 – 260 = 80
Q7	190 units = 760 1 unit = 760 ÷ 190 = 4 4 x 5 = 20	Q8	B= 5 x 4 = 20 A= 4 x 3 = 12 20 + 12 = 32 32 units = 128 1 unit = 128 ÷32 = 4 4 x 4 = 16 16 x 3 = 48 48cm = 0.48m
Q9	a) 100% → 1200 1% → 1200 ÷ 100 = 12 30% → 12 x 30 = $360 b) 1080 + 360 = 1440 100% → 1440 1% → 1440 ÷ 100= 14.40 360 ÷ 14.40 = 25%	Q10	a) 180° - 90° - 66° = 24° 90° - 24° - 24° = 42° b) False True
Q11	Big quarter circle = 1256 ÷ 4 =314 $7\frac{1}{2}$ x 20 x 20 = 200cm2 314 – 200 = 114cm2	Q12	a) 2e – 4 + 2e – 4 =4e – 8 e + 7 + e + 7 =2e + 14 4e – 8 + 2e + 14 =4e + 2e + 14 – 8 =6e + 6 cm b) 6 x 13 = 78 78 + 6 = 84 250 – 84 = 166 $\frac{160}{250} = \frac{83}{125}$

Q13	a) 60 pages b) 600 – 180 = 420 420 ÷ 3 = 140 140 – 60 = 80 pages	Q14	a) <AYB = 64° <ABY = 180 ° – 64° – 85° =31° < TBS = 31° < STB = 180 °– 31° – 31° =118° < YAV = 118° < VAB = 118° – 85° = 33° <AVB = 180 ° – 33° – 31° = 116° b) AUB is not an isosceles triangle because $< UAB$ is not equal to $< UBA$
Q15	a) 14 – 4 = 10 10 units = 120 ÷ 10 =12 12 x 14 = 168 b) 7 x 12 = 84	Q16	a) 30 ÷ 2 = 15 b) 1 book = 8 files 5 units = 15 x 3 = 45 file 1 unit = 45 ÷ 5 = 9 files 4 units = 9 x 4 = 36 files 36 – 12 = 24 24 ÷ 8 = 3 books
Q17	a) 12 – 3 = 9 9 – 6 = 3 3 units = 12 1 unit = 12 ÷ 3 = 4 4 x 4 = 16 b) 4 x 12 = 48		

3

END