SA1

NANYANG PRIMARY SCHOOL

MID-YEAR EXAMINATION 2021

PRIMARY 4

MATHEMATICS
(BOOKLET A)

Total Duration for Booklets A and B: 1 hour 45 minutes

Additional materials: Optical Answer Sheet (OAS)

INSTRUCTIONS TO PUPILS

1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer all questions.
4. Shade your answers in the Optical Answer Sheet (OAS) provided.

Name: _____ ( )

Class: Primary 4 ( )

Questions 1 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) and shade your answer on the Optical Answer Sheet. (30 marks)

1. In 8<u>7</u> 526, the digit 7 is in the _____ place.

(1) tens

(2) hundreds

(3) thousands

(4) ten thousands

2. Which one of the following is 50 213 in words?

(1) Fifty-two thousand and thirteen

(2) Five thousand, two hundred and thirteen

(3) Fifty thousand, two hundred and thirteen

(4) Fifty thousand, twenty-one hundred and three

3. Arrange the following numbers from the greatest to the smallest.

31 146	34 611	31 641	36 411

	Greatest			Smallest
(1)	36 411,	34 611,	31 641,	31 146
(2)	36 411,	31 641,	34 611,	31 146
(3)	31 146,	31 641,	34 611,	36 411
(4)	31 641,	31 146,	36 411,	34 611

4. Which one of the following numbers when rounded to the nearest thousand gives 10 000?

(1) 8890

(2) 9490

(3) 9501

(4) 10 519

5. Which one of the following is a factor of 54?

(1) 5

(2) 6

(3) 7

(4) 8

6. Which one of the following is an equivalent fraction of $\frac{6}{7}$?

(1) $\frac{36}{49}$

(2) $\frac{18}{21}$

(3) $\frac{10}{11}$

(4) $\frac{5}{6}$

7. Which one of the following fractions is **greater** than $\frac{1}{2}$?

(1) $\frac{1}{4}$

(2) $\frac{3}{6}$

(3) $\frac{5}{11}$

(4) $\frac{7}{12}$

8. Convert $6\frac{2}{3}$ to an improper fraction.

(1) $\frac{12}{3}$

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

(3) $\frac{19}{3}$

(4) $\frac{20}{3}$

9. A basket contains 30 coloured balls. $\frac{2}{5}$ of them are red. How many red balls are there?

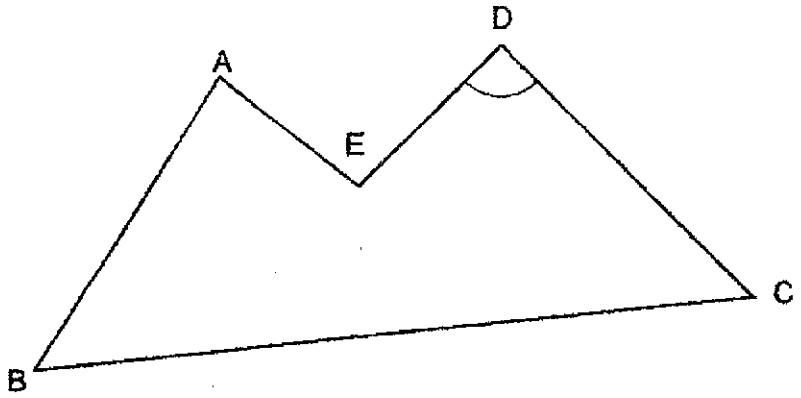
(1) 6

(2) 2

(3) 12

(4) 18

10. Name the marked angle in the figure below.



(1) ∠AED

(2) ∠EDC

(3) ∠DCE

(4) ∠EDA

11. The mass of Box A is 1015 g. The mass of Box B is 7 times as heavy as Box A. What is the total mass of both boxes?

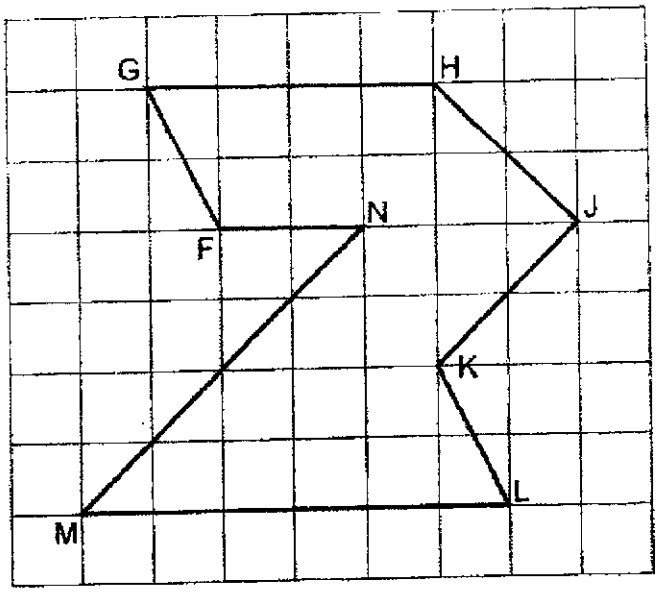
(1) 1160 g

(2) 6090 g

(3) 7105 g

(4) 8120 g

12. In the square grid below, which two lines are perpendicular to each other?



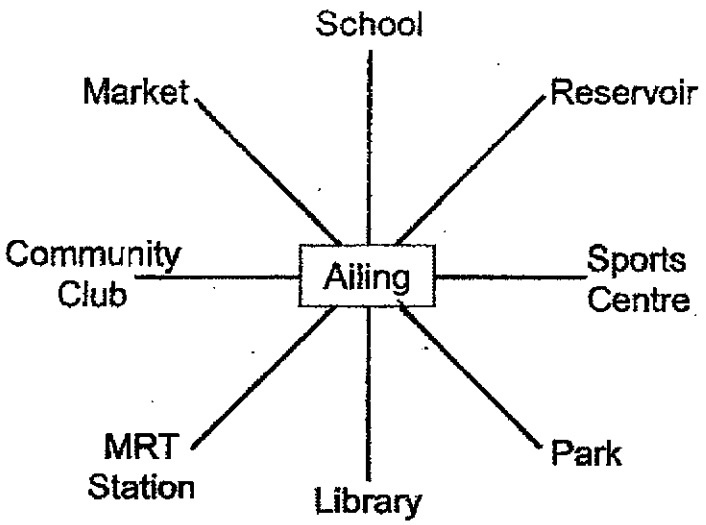
(1) JK and HJ

(2) MN and JK

(3) GH and ML

(4) JK and KL

13. Study the figure below.



Ailing is facing the park and she makes a $\frac{3}{4}$ turn anti-clockwise. What place is she facing now?

(1) Market

(2) School

(3) Reservoir

(4) MRT station

14. Use the digits 9, 7, 2, 0, 3 and 5 to form the smallest 5-digit even number. You can only use each digit once.

(1) 20 357

(2) 23 570

(3) 30 572

(4) 97 532

15. Muthu, Nazri, Owen and Peiling had 4 different pets: a dog, a cat, a bird and a goldfish. Muthu's pet lives in the water. Both Nazri and Peiling do not own a cat. Nazri's pet has only 2 legs. Whose pet is a dog?

(1) Peiling

(2) Owen

(3) Nazri

(4) Muthu

NANYANG PRIMARY SCHOOL

MID-YEAR EXAMINATION 2021

PRIMARY 4

MATHEMATICS
(BOOKLET B)

Total Duration for Booklets A and B: 1 hour 45 minutes

INSTRUCTIONS TO PUPILS

1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer all questions.
4. Write your answers in this booklet.

Name: _____ ( )

Class: Primary 4 ( )

Parent's Signature: _____

Booklet A	**/ 30**
Booklet B	**/ 70**
Total	**/ 100**

Please sign and return the examination paper the next day. Any queries should be raised at the same time when returning paper.

Questions **16** to **35** 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. (40 marks)

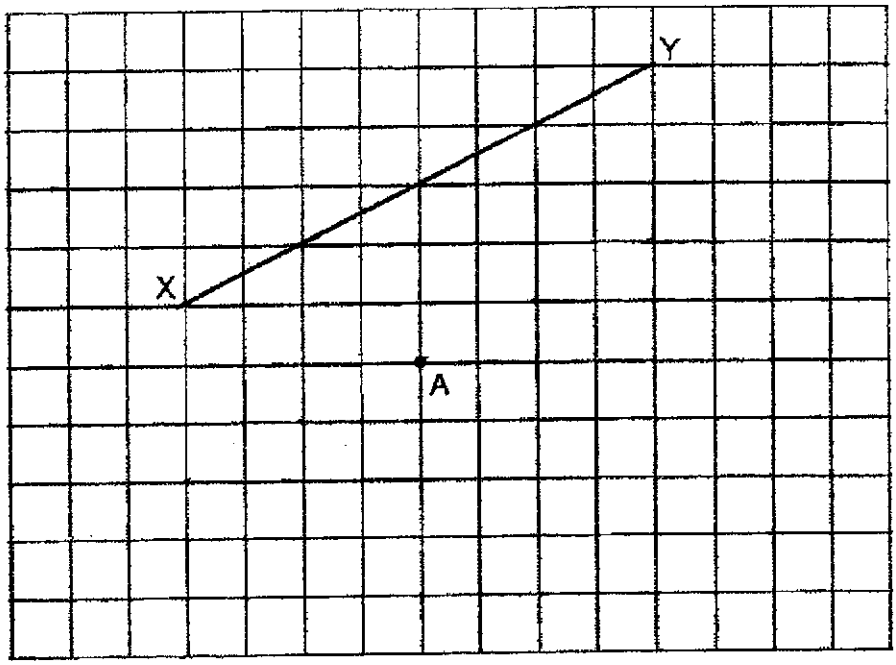
16. Write down all the common factors of 9 and 36.

Ans: _____

17. Circle the numbers that are multiples of 4.

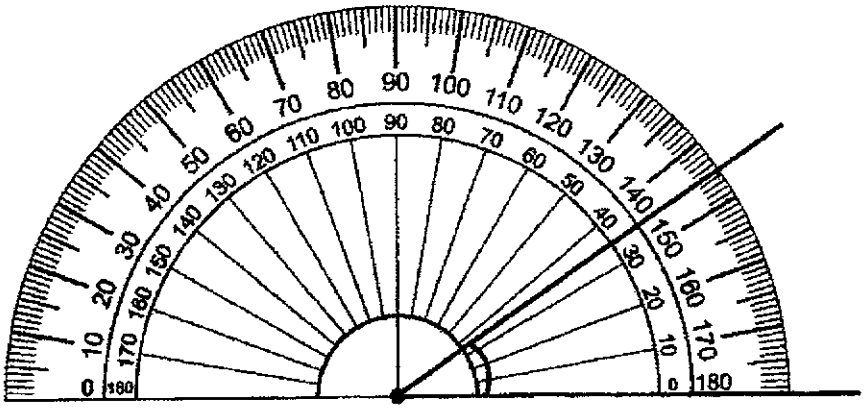
16	18	1	22	20

18. (a) In the square grid below, draw a line parallel to line XY and passing through point A.



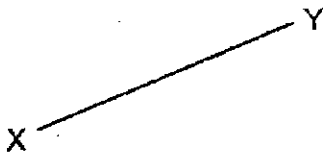
[1]

(b) What is the size of the marked angle in degrees?

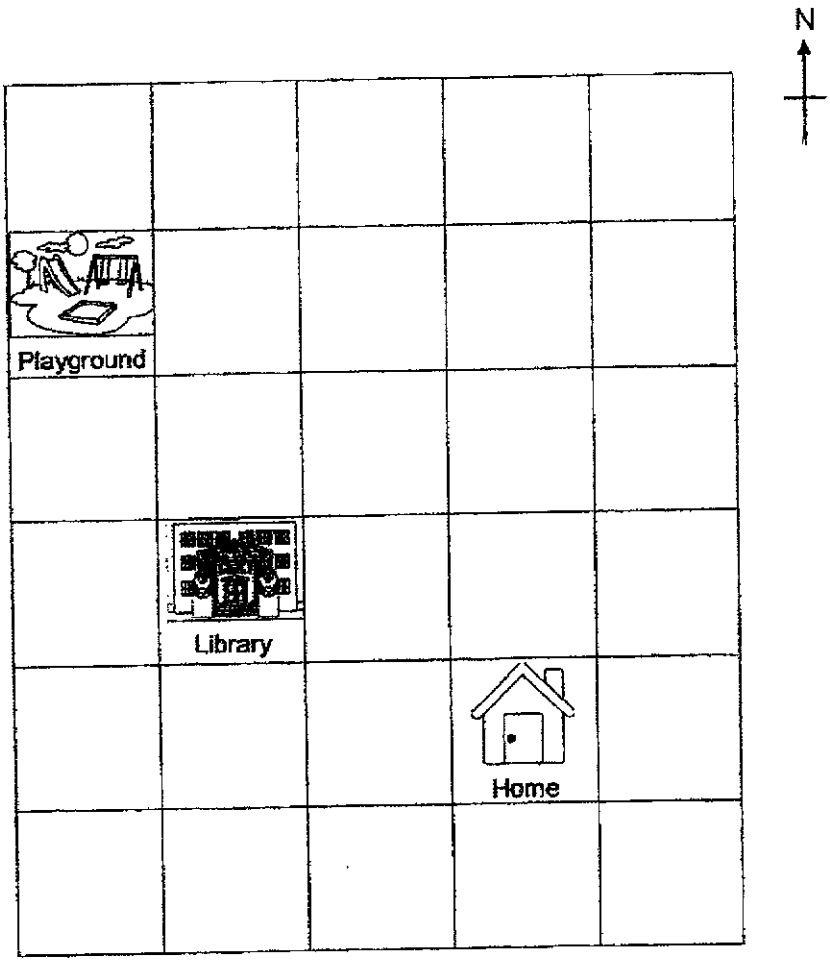


Ans: (b) _____° [1]

19. Using a protractor and a ruler, draw $\angle XYZ = 66°$. Mark and label the angle. The line XY has been drawn for you.



20. Khairul's home, the playground and the library are located as shown in the square grid below.



[1]

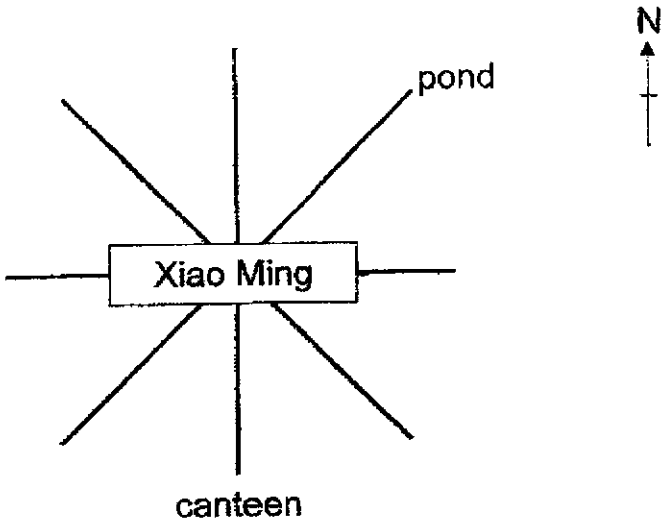
(a) In what direction is the playground from Khairul's home?

(b) A new market will be built at a location west of Khairul's home and south-west of the library. Put a cross **(X)** in the square where the new market will be built.

Ans: (a) _____ [1]

21. Study the figure below.

Xiao Ming is facing the pond and he turns to face the canteen. What angle has Xiao Ming turned through in the clockwise direction?



Ans: _____ °

22. Complete the number pattern.

7580, 8030, 8480, 8930, ____?____, 9830

Ans: _____

23. Write down the common multiples of 2 and 3 that are greater than 10 but less than 20.

Ans: _____

24. Jane bought 2439 beads. She bought 1107 beads more than Kaili. How many beads did Jane and Kaili buy altogether?

Ans: _____

---

25. Siti saved $146 each month. How much did she save in 4 years?

Ans: $_____

---

26. The difference between two numbers is 1152. The greater number is 4 times the smaller number. What is the smaller number?

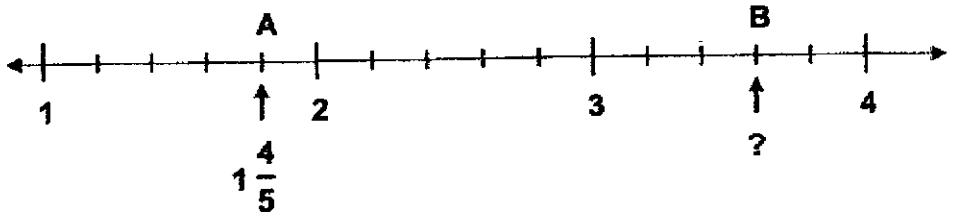
Ans: _____

---

27. There are 40 pupils in class 4H. $\frac{3}{5}$ of the pupils are boys. How many more boys than girls are there in class 4H?

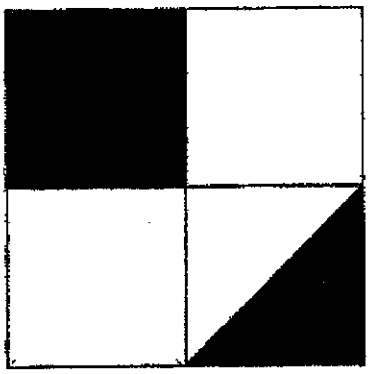
Ans: _____

28. Refer to the number line below. Letter A represents $1\frac{4}{5}$. What mixed number is represented by letter B?



Ans: _____

29. The figure below is made up of 4 identical squares. One of the squares is divided equally into 2 triangles. What fraction of the figure is shaded?



Ans: _____

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30. There was a bar of chocolate. Xavier ate $\frac{1}{4}$ of the bar of chocolate. Jonathan ate $\frac{1}{3}$ of the bar of chocolate. What fraction of the bar of chocolate was left?

Ans: _____

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31. Amin had three ropes. The lengths of the three ropes were $\frac{1}{2}$ m, $\frac{4}{5}$ m and $\frac{1}{4}$ m. What was the total length of the longest rope and the shortest rope? Give your answer as a mixed number.

Ans: _____ m

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32. Mrs Lim had $\frac{1}{5}$ kg of flour at first. She bought another $\frac{3}{5}$ kg of flour. She used $\frac{1}{6}$ kg of flour to bake a cake. How much flour had she left?

Ans: _____ kg

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33. Tom was watching a musical performance in a hall. He was seated in the last row. There were 12 seats on his left and 11 seats on his right. In front of him, there were 105 rows of seats. There was an equal number of seats in each row. How many seats were there altogether in the hall?

Ans: _____

---

34. Peter drank $\frac{2}{5}\ell$ of coffee on Monday. He drank $\frac{1}{10}\ell$ of coffee less on Tuesday than on Monday. What was the total amount of coffee Peter drank for the two days?

Ans: _____ ℓ

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35. Daven had some money at first. After spending $80 on a pair of running shoes and $20 on a shirt, he had $\frac{3}{8}$ of his money left. How much money did he have at first?

Ans: $_____

For questions **36** to **43**, show your working clearly 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. (30 marks)

36. Mr Lee had 2158 fruit tarts. He packed them into boxes of 5 fruit tarts each and sold 241 boxes of fruit tarts. How many boxes of 5 fruit tarts are left?

Ans: _____ [3]

37. Mr Lum has more than 30 but less than 60 pens. He can pack all the pens into bags of 5 with no left over. He can also pack all the pens into bags of 6 with 2 pens left. How many pens does Mr Lum have?

Ans: _____ [3]

38. The total mass of an apple, a papaya and a mango is $\frac{11}{12}$ kg. The total mass of the papaya and the mango is $\frac{5}{6}$ kg. The mango is $\frac{1}{6}$ kg heavier than the apple.

(a) What is the mass of the apple?

(b) What is the mass of the mango?

Ans: (a) _____ [2]

(b) _____ [2]

39. Lydia had a piece of ribbon. She used $\frac{3}{10}$ m of the ribbon to make a hairband and $\frac{5}{8}$ m of the ribbon to tie a parcel.

(a) What was the difference between the length of ribbon used to make the hairband and the length of ribbon used to tie the parcel?

(b) What was the total length of ribbon used by Lydia?

Ans: (a) _____ [2]

(b) _____ [2]

40. The square grid below shows the sitting positions of some pupils in Class 4A.

Ali	Bala	Chris
Dan	Ethan	Fandi
Gopal	Haitao	Jamie

(a) Who was sitting west of Haitao?

(b) Who was sitting south of Bala and north-west of Jamie?

(c) Who was sitting north-east of Ethan?

(d) Dan passed a parcel to pupil X who was sitting south-east of him. Then pupil X passed the parcel to pupil Y who was sitting east of him. Who was pupil Y?

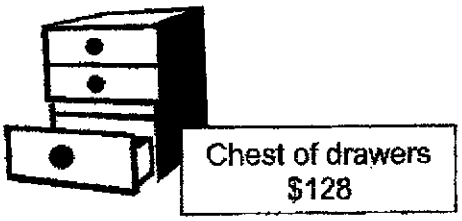
Ans: (a) _____ [1]

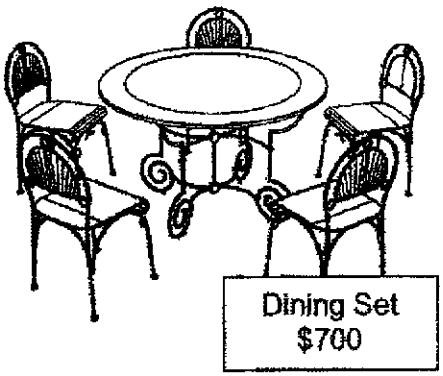
(b) _____ [1]

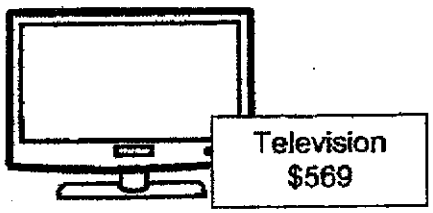
(c) _____ [1]

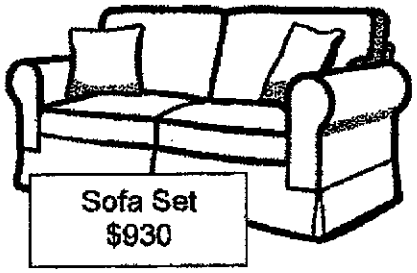
(d) _____ [1]

41. Mrs Lim had $2000. She bought 3 different items and had some money left. Two of the items she bought cost $1499.









(a) Which were the two items she bought with $1499?

(b) How much had she left after buying the 3 different items?

Ans: (a) _____ and _____ [1]

(b) _____ [3]

42. The table below shows how numbers are arranged in rows with 5 columns, A, B, C, D and E.

	A	B	C	D	E
Row 1	2		4		6
Row 2		10		8	
Row 3	12		14		16
Row 4		20		18	
Row 5	22		24		26
Row 6		30		28	
Row 7	32		34		36
Row 8					

[2]

(a) Complete the table for Row 8.

(b) In which row can number 212 be found?

Ans: (b) Row _____ [2]

43. Rishi spent $\frac{3}{4}$ h to read Book A and Book B.

He spent 2 h to read Book B and Book C.

He spent $\frac{2}{5}$ h more to read Book D than Book C.

(a) How much more time did he spend to read Book C than Book A?

(b) How much time did he spend to read Book B and Book D?

Ans: (a) _____ [2]

(b) _____ [2]

End of Paper

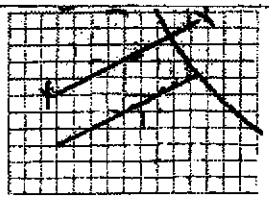
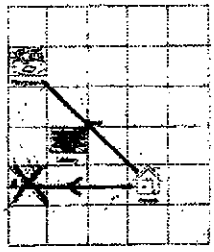
ANSWER KEY

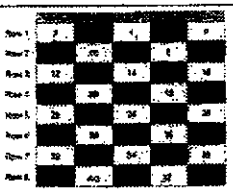
YEAR : 2021
LEVEL : Primary 4
SCHOOL : Nanyang Primary School
SUBJECT : MATHEMATICS
TERM : Mid-Year Examination

BOOKLET A

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

BOOKLET B

Q16	1, 3 and 9	Q17	Circle 16 and 20
Q18	 (a) (b) 35°	Q19	 Either drawing upwards or downwards
Q20	(a) North-West  (b)	Q21	90+45=135
Q22	8930+450=9380	Q23	12 and 18
Q24	2439-1107=1332 2439+1332=3771	Q25	$12 \times 4 = 48$ $146 \times 48 = 7008$
Q26	$1152 \div 3 = 384$	Q27	$40 \div 5 = 8$ $8 \times 3 = 24$ 40-24=16 24-16=8
Q28	$3\frac{3}{5}$	Q29	2+1=3 $2 \times 4 = 8$ Ans : $\frac{3}{8}$

Q30	$\frac{1}{4}+\frac{1}{3}=\frac{3}{12}+\frac{4}{12}$ $=\frac{7}{12}$ $1-\frac{7}{12}=\frac{5}{12}$ or equivalent	Q31	$\frac{4}{5}+\frac{1}{4}=\frac{16}{20}+\frac{5}{20}$ $=\frac{21}{20}$ $=1\frac{1}{20}$
Q32	$\frac{1}{5}+\frac{3}{5}=\frac{4}{5}$ $\frac{4}{5}-\frac{1}{6}=\frac{24}{30}-\frac{5}{30}$ $=\frac{19}{30}$	Q33	12+11+1=24 105+1=106 $106\times24=2544$
Q34	$\frac{2}{5}-\frac{1}{10}=\frac{4}{10}-\frac{1}{10}$ $=\frac{3}{10}$ $\frac{2}{5}+\frac{3}{10}=\frac{4}{10}+\frac{3}{10}$ $=\frac{7}{10}$	Q35	$1-\frac{3}{8}=\frac{5}{8}$ 80+20=100 $100\div5=20$ $20\times8=160$
Q36	$2158\div5=431R3$ 431-241=190	Q37	Multiple of 5= 40,45,50 Multiple of 6 +2=32 38,44,50 Common multiple = 50 Ans : 50
Q38	(a) $\frac{11}{12}-\frac{5}{6}=\frac{11}{12}-\frac{10}{12}$ $=\frac{1}{12}$kg (b) $\frac{1}{6}+\frac{1}{12}=\frac{2}{12}+\frac{1}{12}$ $=\frac{3}{12}$ $=\frac{1}{4}$kg	Q39	(a) $\frac{5}{8}-\frac{3}{10}=\frac{25}{40}-\frac{12}{40}$ $=\frac{13}{40}$m (b) $\frac{3}{10}+\frac{5}{8}=\frac{12}{40}+\frac{25}{40}$ $=\frac{37}{40}$m
Q40	(a) Gopal (b) Ethan (c) Chris (d) Jamie	Q41	(a) 569+930=1499 Ans : Television and Sofa Set (b) 1499+128=1627 2000-1627=$373
Q42	 (a) (b) For 12, $1\times2=2$ 2+1=3→ row For 22, $2\times2=4$ 4+1=5 → row so, $21\times2=42$ 42+1=43 Ans : 43	Q43	(a) $2-\frac{3}{4}=1\frac{1}{4}$h (b) $2+\frac{2}{5}=2\frac{2}{5}$h

2
2ND