PEI HWA PRESBYTERIAN PRIMARY SCHOOL
SEMESTRAL ASSESSMENT 2

PRIMARY 3
MATHEMATICS PAPER

27 OCT 2022

Parent's signature

Name: _____

Form Class / Register No. : 3R _____/ _____

Total time:1 h 45 min

INSTRUCTIONS TO CANDIDATES

1. Write your Name, Class and Register No. in the spaces provided above.
2. DO NOT turn over this page until you are told to do so.
3. Follow all instructions carefully and answer all questions.
4. For Section A, shade your answers on the Optical Answer Sheet (OAS) provided.
5. For Section B and C, write all your answers in this booklet.
6. The use of calculator is **NOT ALLOWED**.

Marks (Section A)	30
Marks (Section B)	30
Marks (Section C)	20
Total Marks:	80

This booklet consists of 17 printed pages, excluding the cover page.

Section A: (15 × 2 = 30 marks)

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.

1. What is the value of the digit 8 in 1987?

   (1) 8000
   (2) 800
   (3) 80
   (4) 8 ( )

2. Which of the following is seven thousand and forty-six in numerals?

   (1) 7040
   (2) 7046
   (3) 7406
   (4) 7460 ( )

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

	Greatest		Smallest
(1)	7380,	8073,	8730
(2)	8037,	8730,	7380
(3)	8730,	7380,	8037
(4)	8730,	8073,	7380 ( )

4. Find the product of 6 and 7.

(1) 36
(2) 42
(3) 48
(4) 56 ( )

5. Which of the following fractions is the smallest?

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

6. What is the missing number in the box?

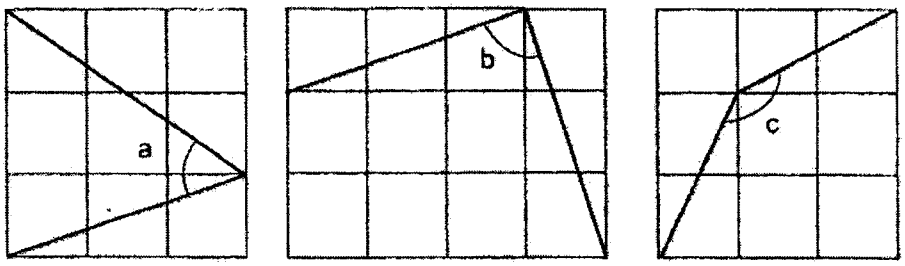
$$\frac{9}{12} = \frac{\boxed{?}}{4}$$

(1) 1
(2) 17
(3) 3
(4) 27 ( )

7. Which of the following is the same as 6 kg 58 g?

(1) 658 g
(2) 6058 g
(3) 6508 g
(4) 6580 g ( )

8. Arrange the angles from the smallest to the greatest.



	Smallest		Greatest
(1)	∠a,	∠b,	∠c
(2)	∠a,	∠c,	∠b
(3)	∠b,	∠a,	∠c
(4)	∠c,	∠a,	∠b

( )

9. Find the sum of the values of the digits '7' in the numbers 7845 and 271.

(1) 707
(2) 770
(3) 7007
(4) 7070 ( )

10. Study the number pattern carefully.

What is the missing number?

(1) 1260
(2) 1470
(3) 1680
(4) 2100 ( )

11. Jon bought 1597 blue beads.
He bought 900 more red beads than blue beads.
How many beads did he buy altogether?

(1) 2294
(2) 2497
(3) 3397
(4) 4094 ( )

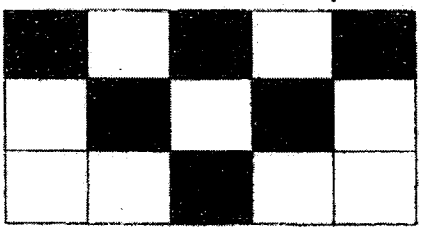
12. I divide a number by 7.
The quotient is 436 and the remainder is 4.
What is the number?

(1) 1751
(2) 1772
(3) 3056
(4) 3080 ( )

13. Gary has $108.
He has three times as much money as Alice.
How much more money does Gary have than Alice?

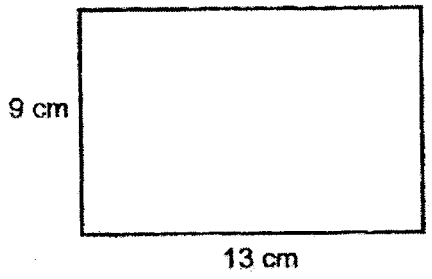
(1) $ 36
(2) $ 54
(3) $ 72
(4) $144 ( )

14. The figure is made up of equal rectangles.
What fraction of the figure is shaded?
Leave your answer in the simplest form.



(1) $\frac{1}{3}$
(2) $\frac{2}{5}$
(3) $\frac{6}{15}$
(4) $\frac{9}{15}$ ( )

15. Find the perimeter of the rectangle below.



(1) 22 cm
(2) 44 cm
(3) 117 cm
(4) 234 cm

Section B: (15 × 2 = 30 marks)

Show your working clearly and write your answers in the spaces provided.

For questions which require units, give your answer in the units stated.

16. What is the missing number in the box?

$8975 = 8000 + \boxed{?} + 5$

Ans : _____

17. What is the missing number in the box?

$$\begin{array}{r} 5\ 0\ 7\ 9 \\ -\ 3\ \boxed{?}\ 9\ 3 \\ \hline 1\ 7\ 8\ 6 \end{array}$$

Ans : _____

18. Find the remainder of 509 ÷ 7.

Ans : _____

19. Find the difference between $\frac{1}{3}$ and $\frac{5}{6}$

Ans : _____

20. What are the possible values of A and B?

$$\frac{\boxed{A}}{3} + \frac{1}{6} + \frac{\boxed{B}}{12} = 1$$

Ans : A: _____

B: _____

21. I have a 1-digit number.

When I add 20 to the number, the answer is the same when I multiply the number by 6. What is the number?

Ans : _____

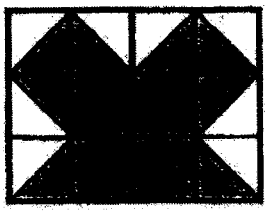
22. Express 5 hours and 55 minutes in minutes.

Ans :_____ min

23. The figure below is made up of 12 squares.

The area of each square is 4 cm^2.

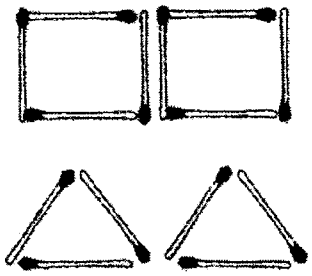
Find the area of the shaded figure.



Ans :_____ cm^2

24. Peter used 43 matchsticks to form 13 squares and triangles altogether.

How many squares are there?



... ...

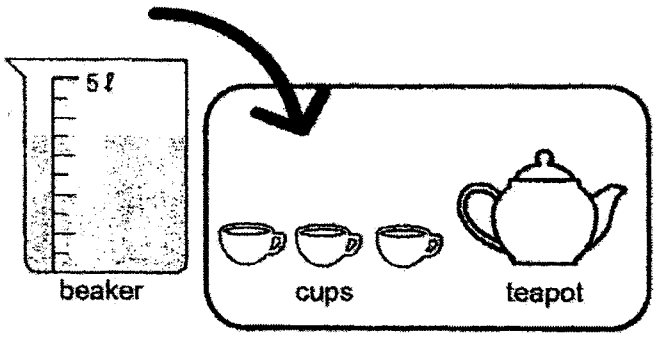
... ...

Ans : _____

25. All of the water in the beaker was poured into 3 identical cups and 1 teapot.

After pouring, each cup contained 200 mℓ of water.

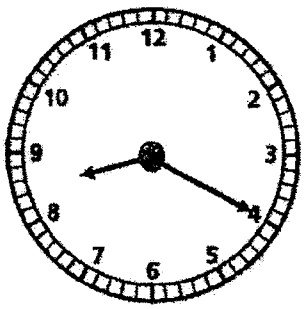
Find the volume of water in the teapot in ℓ and mℓ.



Ans : _____ ℓ _____ mℓ

26. In the morning, the clock shown is 50 minutes slow.

What should be the actual time?

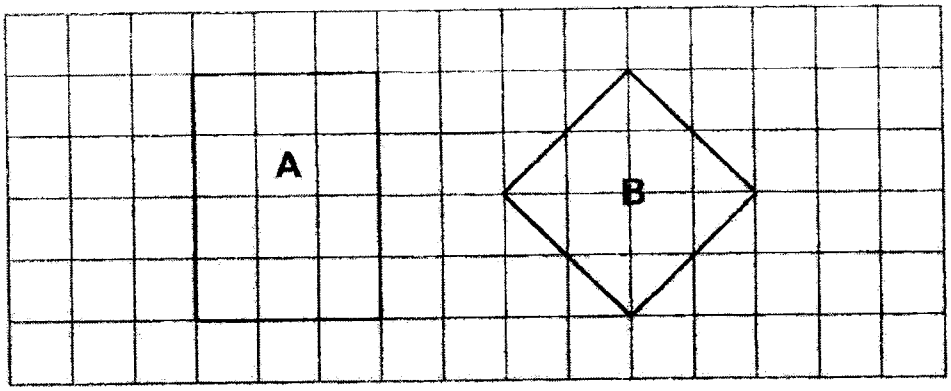


Ans : _____ a.m.

27. Figure A is a rectangle and Figure B is a square.

i) Which figure has a greater area?

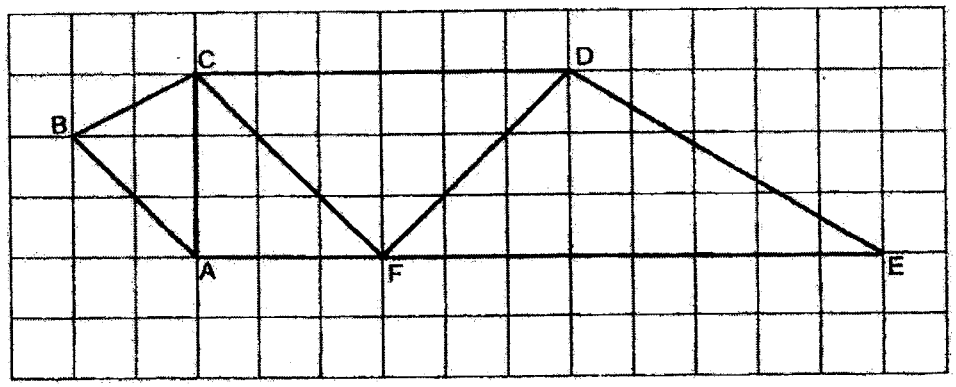
ii) Find the difference in their area.



Ans : i) Figure : _____

ii) _____ square units

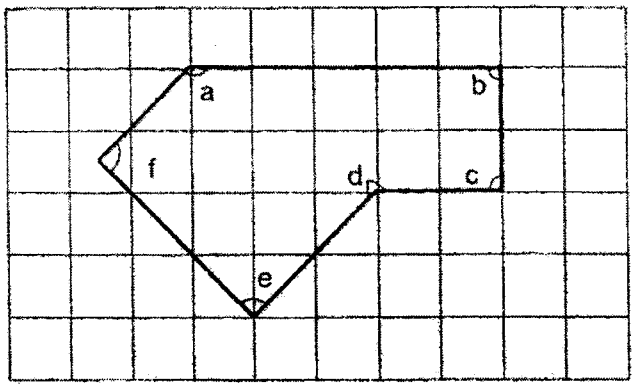
28. Study the figure in the square grid and fill in the blanks below.



Ans: a) Line AB is parallel to Line _____

b) Line CF is perpendicular to Line _____

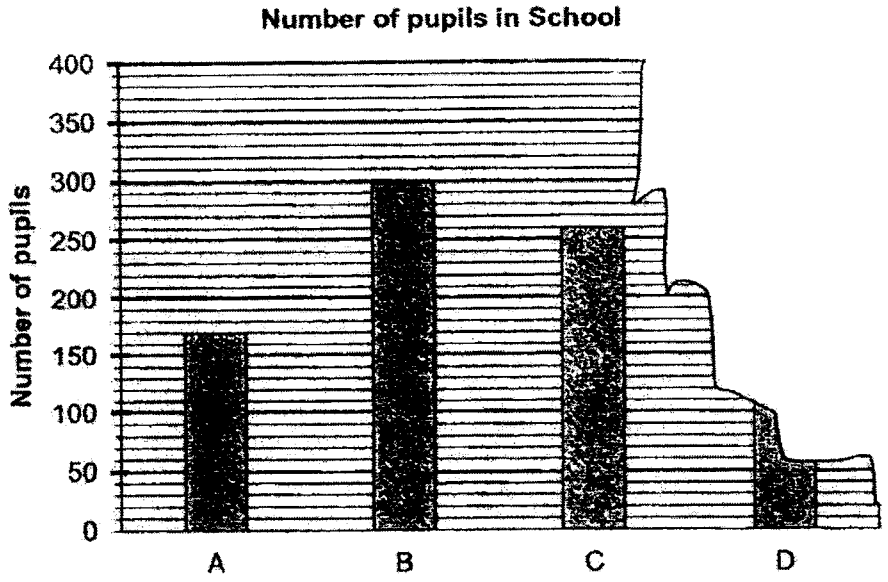
29. Study the figure in the square grid.



List all the right angles.

∠ _____

30. The graph below shows the number of pupils in School A to School D.
Part of the graph is torn and the number of pupils in School D is not shown.



a) How many pupils are there in School C?

Ans : _____

b) The number of pupils in School B is twice of those in School D.
How many pupils are there in School D?

Ans : _____

Section C: (20 marks)

For questions 31 to 35, show your working and number statements clearly.
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.

31. There were 3265 children and 1673 adults at a concert.

a) How many more children than adults were there?

b) There were 1527 boys. How many girls were there?

Working

Ans: a) _____ [2]

b) _____ [2]

32. Lynn had $229 and Rachel had $359. After Rachel gave Lynn some money, Lynn had three times as much money as Rachel.

a) How much money did the girls have altogether?

b) How much money did Rachel have in the end?

Working

Ans: a) _____ [2]

b) _____ [2]

33. Ali and Ben were each given $10 to spend on food items shown below.

Working

a) Which two items could Ali buy with the exact amount given?

b) Ben bought 2 different food items.

He spent the least possible amount of money.

How much change would he receive?

Menu from Chin's kitchen

Ice-cream
$2.50

Soda
$3.10

Burger
$6.50

Fries
$4.40

Sandwich
$3.50

Noodles
$7.90

Pizza
$8.50

Salad
$6.60

Ans: a) _____, _____ [1]

b) _____ [3]

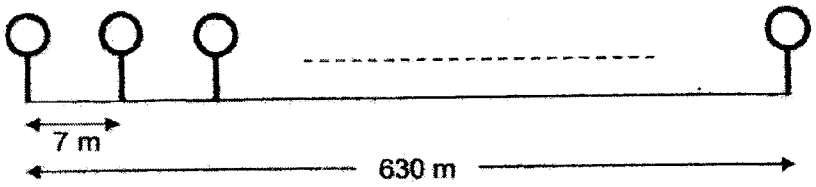
34. A road is 630 m long.

A lamp post is placed at every 7 m interval.

A lamp post is placed at the start and the end of the road.

a) Find the distance between the first and fourth lamp post.

b) Find the total number of lamp posts along the road.



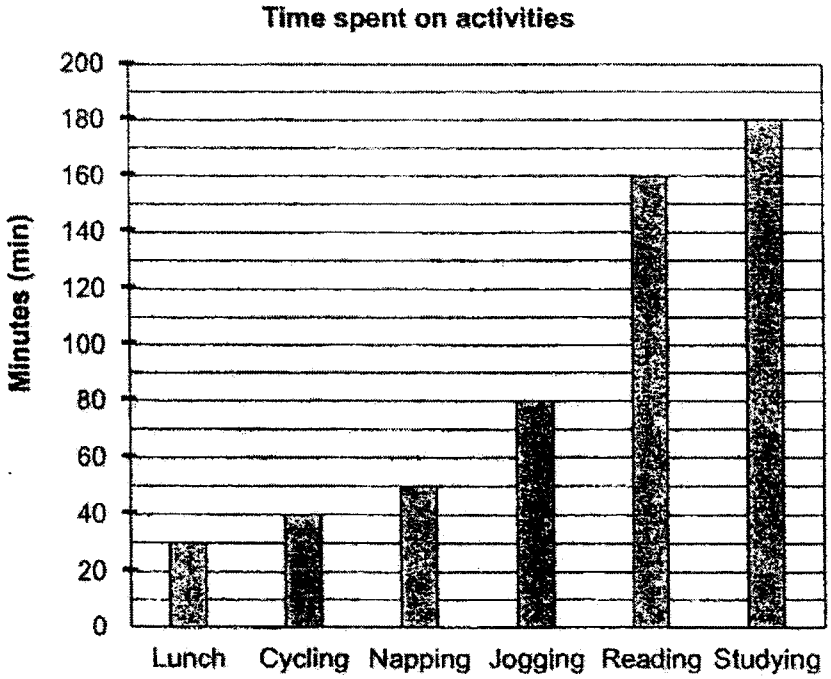
Working

Ans: a) _____ [1]

b) _____ [3]

35. The bar graph below shows the amount of time Bob spent to carry out the different activities in a day.

Working



(a) How long did he spend his time studying?
Give your answer in h and mins.

(b) Which activity did Bob spend twice as much time as jogging?

(c) At 11.55 am, Bob started eating lunch. After lunch, he took a nap.
What time did he wake up?

Ans: a) _____ [1]

b) _____ [1]

c) _____ [2]

End of Paper

YEAR : 2022
LEVEL : PRIMARY 3
SCHOOL : PEI HWA PREBYTERIAN PRIMARY SCHOOL
SUBJECT : MATHEMATICS
TERM : SEMESTRAL ASSESSMENT 2

Section A

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

Section B

Q16. 8000 + 970 + 5 = 8975
Ans: 970

Q17. 5079 – 3293 = 1786
Ans: 2

Q18. 509/7 = 72R5
Ans: 5

Q19. 5/6 – 1/3 = 3/6
Ans: 3/6 OR ½

Q20. Ans: A = 1, B = 6

Q21. 4 + 20 = 24
4 x 6 = 24 (condition met)
Ans: 4

Q22. 1 hour = 60min
5 hours = 60min x 5 = 300min
300min + 55min = 355min
Ans: 355min

Q23. 8 full squares x 4cm² = 32cm²
Ans: 32cm²

Q24. Ans: 4

Q25. 3L500ml = 3500ml
200 x 3 = 600ml
3500ml – 600ml = 2900ml
2900ml = 2L900ml
Ans: 2L900ml

Q26. 50mins after 8.20am is 9.10am
Ans: 9.10am

Q27.
(i) Ans: Figure A
(ii) Ans: 4 square units

Q28
(a) Ans: Line AB is parallel to Line CF
(b) Ans: Line CF is perpendicular to line DF

Q29. List all the right angles.
Ans: f,e,b,c

Q30.
(a) Ans: 260
(b) 300/2 = 150
Ans: 150

Section C
Q31.
(a) 3265 – 1673 = 1592
Ans: There were 1592 more children than adults.
(b) 3265 – 1527 = 1738
Ans: There are 1738 girls.

Q32.
(a) $229 + $359 = $588
Ans: The girls have $588 altogether.
(b) $588/4 = $147
Ans: Rachel had $147 in the end.

Q33.
(a) $6.50 + $3.50 = $10
Ans: Ali could buy the sandwich and burger.
(b) $2.50 + $3.10 = $5.60
$10 - $5.60 = $4.40
Ans: $4.40

Q34.

(a) 4 – 1 = 3

1 interval = 7m

3 intervals = 21m

Ans: The distance between the first and fourth lamp post is 21m.

(b) 630/7 = 90

90 + 1 = 91

Ans: There are 91 lamp posts altogether.

Q35.

(a) 180 min = 3hr

Ans: 3 hours

(b) Ans: reading

(c) Ans: 1.15 PM