

SEMESTRAL ASSESSMENT 1

Primary 4 MATHEMATICS

10 MAY 2016

BOOKLET A

20 questions

40 marks

Total Time For Booklets A and B: 1 h 45 min

NAME : _____

CLASS : PRIMARY 4 _____

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD

FOLLOW ALL INSTRUCTIONS CAREFULLY.

ANSWER ALL QUESTIONS.

Section A (20 x 2 = 40 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 correct oval (1, 2, 3 or 4) on the Optical Answer Sheet.

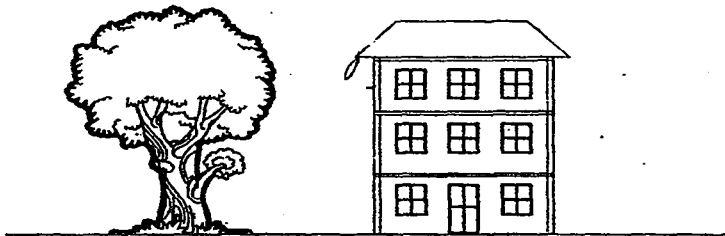
1. The value of digit 8 in 98 423 is _____.

- (1) 8
- (2) 800
- (3) 8000
- (4) 80 000

2. How many tens are there in 62 110?

- (1) 10
- (2) 110
- (3) 211
- (4) 6211

3.



The figure shows a tree next to a three-storey building. Which one of the following could be the height of the tree?

- (1) 1 m
- (2) 10 m
- (3) 100 m
- (4) 1000 m

4. 5 kg 10 g is the same as _____.

- (1) 501 g
- (2) 510 g
- (3) 5010 g
- (4) 5100 g

5. The factors of 63 are 1, 3, 7, _____, _____ and 63.

- (1) 7 and 9
- (2) 8 and 9
- (3) 9 and 21
- (4) 11 and 21

6. Which of the letters below is symmetrical?



- (1) F
- (2) H
- (3) N
- (4) Q

7. The sum of the first 3 multiples of 6 is _____.

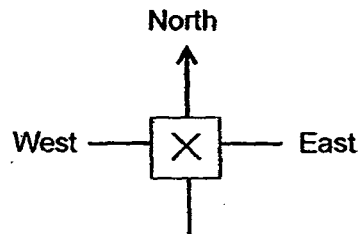
- (1) 9
- (2) 12
- (3) 18
- (4) 36

8. When rounded off to the nearest ten, there are 4860 cans of food collected during a food donation drive. Which of the following is the actual number of cans collected?

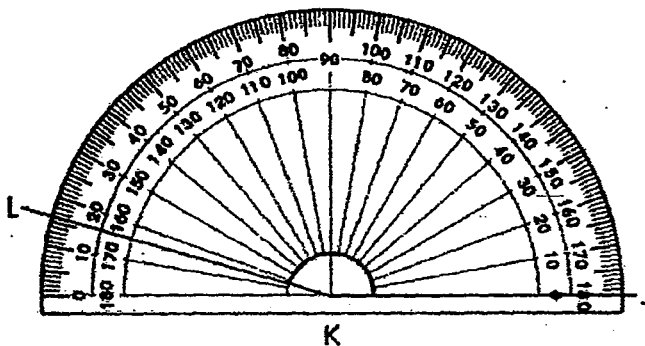
- (1) 4865
- (2) 4864
- (3) 4854
- (4) 4851

9. Xavier is standing on point X, facing West. After making half a turn in an anti-clockwise direction, where will he be facing?

- (1) East
- (2) West
- (3) North
- (4) South



10. What is the size of angle JKL in the diagram below?



- (1) 16°
- (2) 24°
- (3) 164°
- (4) 176°

11. Which one of the following fractions is greater than $\frac{4}{5}$?

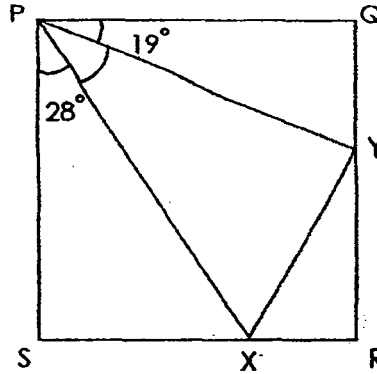
(1) $\frac{8}{9}$

(2) $\frac{9}{12}$

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

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

12. PQRS is a square. The angles in the diagram are not drawn to scale. Find $\angle XPY$.



(1) 43°

(2) 47°

(3) 53°

(4) 62°

13. Arrange the following fractions from the smallest to the greatest.

$$\frac{3}{4}, \quad \frac{2}{3}, \quad \frac{5}{8}$$

(smallest) (greatest)

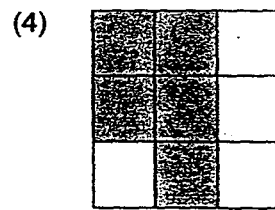
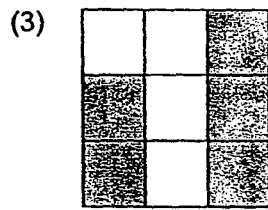
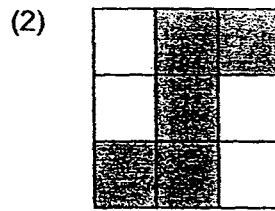
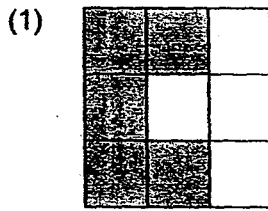
(1) $\frac{2}{3}, \frac{3}{4}, \frac{5}{8}$

(2) $\frac{2}{3}, \frac{5}{8}, \frac{3}{4}$

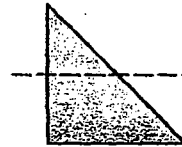
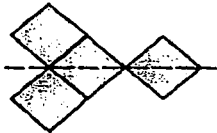
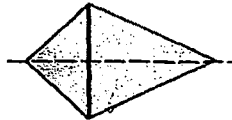
(3) $\frac{3}{4}, \frac{5}{8}, \frac{2}{3}$

(4) $\frac{5}{8}, \frac{2}{3}, \frac{3}{4}$

14. Each figure below is made up of nine squares. Five squares in each figure are shaded. Which one is a symmetric figure?



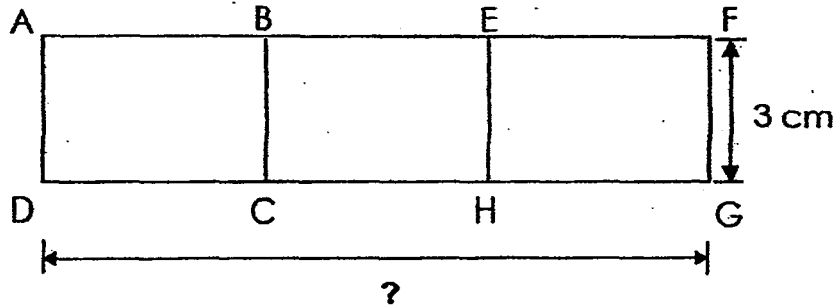
15. In which of the following figures is the dotted line a line of symmetry?



- (1) B only
 (2) A and B
 (3) A and D
 (4) B and C
16. Jason spent 45 minutes watching the show "Frogman". He then spent 1 hour 25 minutes watching "Planet Wars". How long did he spend watching both shows?

- (1) 80 minutes
 (2) 85 minutes
 (3) 130 minutes
 (4) 170 minutes

17. The figure is made up of three identical rectangles ABCD, BEHC and EFGH. The area of each rectangle is 15 cm^2 . What is the length of DG?



- (1) 5 cm
(2) 8 cm
(3) 9 cm
(4) 15 cm
18. Tristan has 25 coins with a total value of \$8. They are a mixture of 20¢ coins and 50¢ coins. How many 20¢ coins does Tristan have?
- (1) 10
(2) 15
(3) 16
(4) 20
19. Toothpicks are used to form the figures below. Figure 1 is formed using 4 toothpicks. Figure 2 is formed using 7 toothpicks.



Figure 1



Figure 2



Figure 3



Figure 4

How many toothpicks are needed to form Figure 7?

- (1) 9
(2) 16
(3) 22
(4) 28

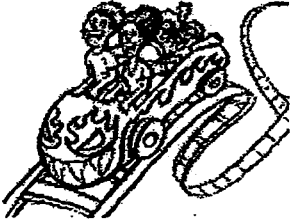
20. The prices of tickets for a roller coaster ride are shown below.

*Fun Ride on a
Roller Coaster!*

Adult: \$10

Child: \$6

Family package for 2 adults and 2 children: \$25



Mr Williams went on the ride with his wife and three children.
What was the least amount the family had to pay for the ride?

- (1) \$28
- (2) \$31
- (3) \$38
- (4) \$42

End of Booklet A
Go on to Booklet B

SEMESTRAL ASSESSMENT 1

Primary 4 MATHEMATICS

10 MAY 2016

BOOKLET B

25 questions

60 marks

Total Time For Booklets A and B: 1 h 45 min

NAME : _____ ()

CLASS : PRIMARY 4 _____

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.

FOLLOW ALL INSTRUCTIONS CAREFULLY.

ANSWER ALL QUESTIONS.

MARKS OBTAINED :

BOOKLET A: _____ / 40

BOOKLET B: _____ / 60

TOTAL : _____ / 100

Section B (20 x 2 = 40 marks)

Show your working clearly in the spaces below each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

21. What is the first common multiple of 6 and 8?

Do not
write in
this
space.

Answer: _____

22. Use the digits below to form the smallest 5-digit odd number.

8, 3, 0, 7, 2

Answer: _____

23. When a number is divided by 9, the quotient is 312 and the remainder is 6.
What is the number?

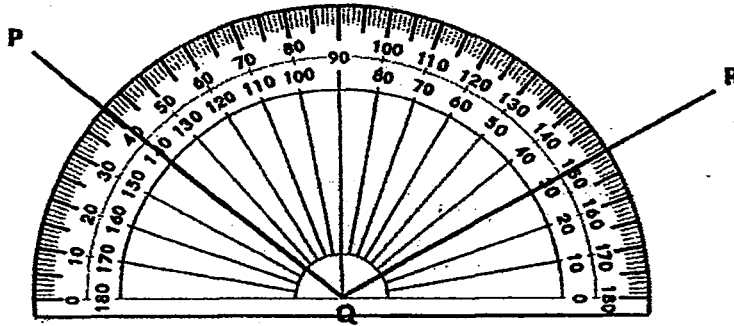
Answer: _____

24. Danny took 100 minutes to bake a cake. He started at 4.00 p.m.
At what time did he finish baking the cake?

Answer: _____ p.m.

--

25. Find $\angle PQR$.



Do not
write in
this
space.

Answer: _____°

26. Fill in the blanks with kg or g.

(a) A packet of chicken rice weighs 170 _____.

(b) Your classmate weighs 42 _____.

Answer: (a) _____

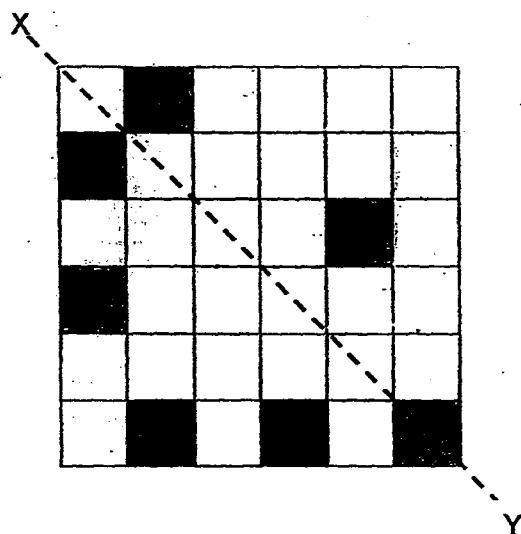
(b) _____

27. Box B weighs 860 g more than Box A. Box C weighs 4 times as much as Box A. The total mass of the 3 boxes is 4178 g. Find the mass of Box A.

Answer: _____ g



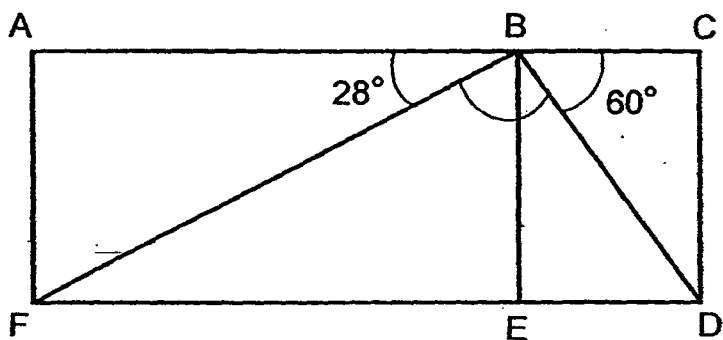
28. The dotted line XY is the line of symmetry for the figure below. What is the least number of squares that must be shaded in order to complete the symmetric pattern?



Answer: _____

Do not
write in
this
space.

29. The figure is made up of two rectangles ABEF and BCDE. The angles are not drawn to scale. Find $\angle FBD$.



Answer: _____°

--

30. Mrs Tan had a cake. She gave $\frac{1}{3}$ of it to Joseph and $\frac{1}{2}$ of it to Alice.
What fraction of the cake has Mrs Tan left?

Do not
write in
this
space.

Answer: _____

31. There are 20¢ coins in a box. They add up to a value of \$8.60.
How many of such coins are there in the box?

Answer: _____

32. Jane puts her sweets into goodie bags. Each goodie bag contains the same number of sweets. If she puts 2 sweets, 4 sweets or 7 sweets into each goodie bag, she will not have any sweets left. What is the smallest possible number of sweets Jane has?

Answer: _____

--

33. Mrs Goh had 10 m of cloth. She used 5 m 60 cm of it to make a dress and 105 cm of it to make some ribbons. How much cloth had she left? Express your answer in cm.

Do not write in this space.

Answer: _____ cm

34. What fraction of the figure is shaded?



Answer: _____

35. Look at the equation below.

$$\frac{8}{12} = \frac{X}{6} = \frac{2}{Y}$$

Find the values of X and Y.

Answer: X: _____

Y: _____

--

36. Gilbert and Shawn had a total of 86 stickers at first. After Gilbert gave 13 stickers to Shawn, both of them have an equal number of stickers. How many stickers did Gilbert have at first?

Do not
write in
this
space.

Answer: _____

37. The cost of 6 files and 10 markers is equal to the cost of 4 storybooks. How many storybooks cost as much as 9 files and 15 markers?

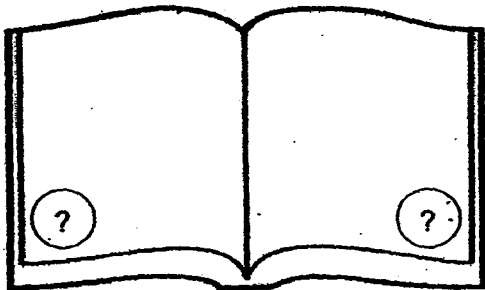
Answer: _____

38. There are 8 more cows than ducks on a farm. They have 1004 legs altogether. How many ducks are there on the farm?

Answer: _____

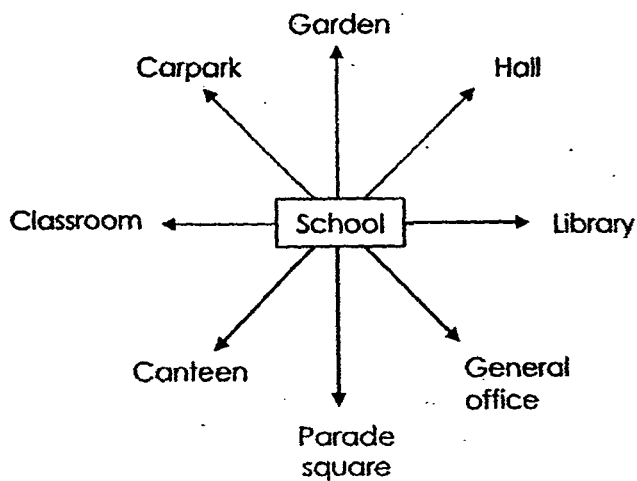
--

39. There are 30 pages in a storybook.
The product of two page numbers facing each other is 420.
What are the numbers on these two pages?



Answer: _____ and _____

40. James is facing the canteen. He turns 135° anti-clockwise and makes $\frac{1}{4}$ turn in the clockwise direction. Where is he facing now?



Answer: _____

Do not
write in
this
space

--

Section C (5 x 4 = 20 marks)

Work out the answers for each of the following questions. All workings must be shown clearly in the space provided.

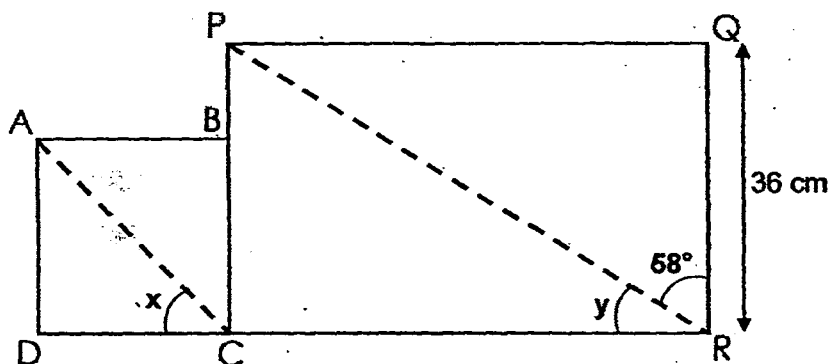
Do not
write in
this
space

41. A fruit seller has 364 green apples.
She has 3 times as many red apples as green apples.
She puts all the apples equally into 7 boxes.
How many apples are there in each box?

Answer: _____ [4]

42. The figure below is not drawn to scale. It is made up of a square ABCD and a rectangle PQRC. BC is twice as long as PB. QR = 36 cm.

Do not
write in
this
space



- (a) Find the length of PB.
- (b) Find the sum of $\angle x$ and $\angle y$.

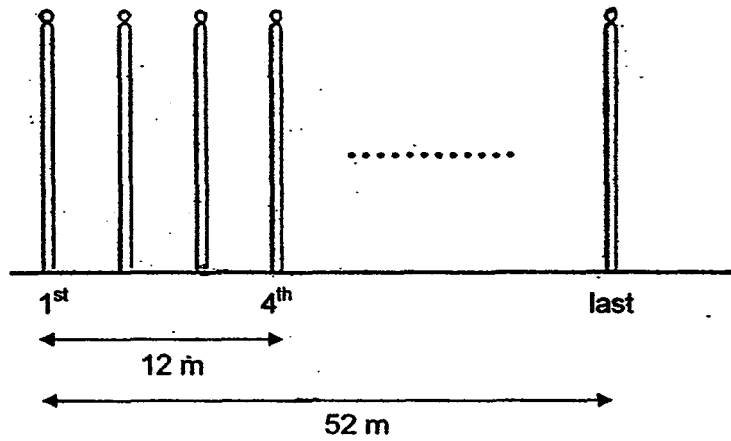
Answer: (a) _____ [2]

(b) _____ [2]

--

43. Some flag poles are arranged in a straight line, at an equal distance from one another. The distance between the 1st and the last flag pole is 52 m. The distance between the 1st and the 4th flag pole is 12 m. How many flag poles are there altogether?

Do not
write in
this
space



Answer: _____ [4]

--

44. Adam, Ben, Charles, Danny and Eddy meet up at the community club to play badminton. Each of them is to play against each other only once. How many matches of badminton will these boys play in total?

Do not
write in
this
space

Answer: _____ [4]

--

45. Study the figures below carefully.



Figure 1

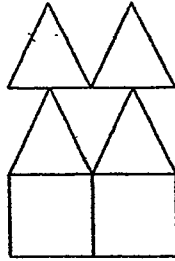


Figure 2

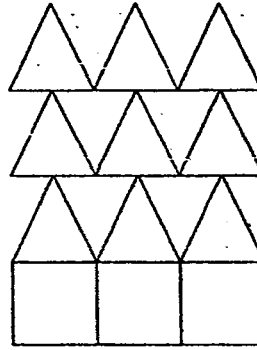


Figure 3

Figure No.	No. of squares	No. of triangles	No. of squares and triangles
1	1	1	2
2	2	4	6
3	3	9	12

- (a) Find the number of triangles in Figure 6.
 (b) Find the total number of squares and triangles in Figure 10.

Answer: (a) _____ [2]

(b) _____ [2]

End of PAPER

Do not
write in
this
space

ANSWER KEY

YEAR : 2016
 LEVEL : PRIMARY 4
 SCHOOL : MARIS STELLA HIGH
 SUBJECT : MATHEMATICS
 TERM : SA1

Booklet A

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
3	4	2	3	3	2	4	2	1	3
Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
1	1	4	1	4	3	4	2	3	2

Booklet B

Q21 24

Q22 20387

Q23 2814

Q24 5:40pm

Q25 110°

Q26a g

Q26b kg

Q27 $4178 - 860 = 3318$
 $3318 \div 6 \Rightarrow \underline{553g}$

Q28 4

Q29 $60 + 28 = 88^\circ$
 $180 - 88 \Rightarrow \underline{92^\circ}$

Q30 $\frac{12}{12} - \frac{10}{12} = \frac{2}{12}$
 $\frac{2}{12} \div 2 \Rightarrow \frac{1}{6}$

Q31 $20¢ \times 5 = \$1$
 $20¢ \times 3 = 60¢$
 $800 \div 20 = 40$
 $40 + 3 \Rightarrow \underline{43 \text{ coins}}$

- Q32 28
- Q33 $1000 - 665 \Rightarrow \underline{335\text{cm}}$
- Q34 $\frac{5}{12}$
- Q35 X: 4
 Y: 3
- Q36 $86 \div 2 = 43$
 $43 + 13 \Rightarrow \underline{56 \text{ stickers}}$
- Q37 $6F + 10M = 4SB$
 $3F + 5M = 2SB$
 $9F + 15M \Rightarrow \underline{6 \text{ storybooks}}$
- Q38 $1004 - 32 = 92$
 $972 \div 6 \Rightarrow \underline{162 \text{ ducks}}$
- Q39 20 and 21
- Q40 Parade square
- Q41 $364 \times 3 = 1092$
 $1092 + 364 = 1456$
 $1456 \div 7 \Rightarrow \underline{208 \text{ apples}}$
- Q42a 12 cm
- Q42b 77°
- Q43 $12 \div 3 = 4$
 $52 \div 4 = 13$
 $13 + 1 \Rightarrow \underline{14 \text{ flag poles}}$
- Q44 $4 + 3 + 2 + 1 \Rightarrow \underline{10 \text{ matches}}$
- Q45a $6 \times 6 \Rightarrow \underline{36 \text{ triangles}}$
- Q45b $10 \times 11 \Rightarrow \underline{110 \text{ total}}$

