# PRIMARY 5 MID-YEAR EXAMINATION 2016

Date: 13 May 2016

## MATHEMATICS

### PAPER 1

### (BOOKLET A)

6. You are **not** allowed to use a calculator.

## Paper 1 (Booklet A)

### Multiple Choice Questions

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. Shade the correct oval (1, 2, 3 or 4) on the Optical Answer Sheet. [20 marks]

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1. In 9<u>6</u> 382, the digit _____ is in the thousands place.

   (1) 6
   (2) 2
   (3) 8
   (4) 9

2. What is the sum of 4 thousands, 3 hundreds and 94 ones?

   (1) 4 363
   (2) 4 394
   (3) 40 394
   (4) 43 634

3. Which of the following has the same value as $\frac{9}{25}$?

   (1) 0.9
   (2) 0.36
   (3) 0.09
   (4) 0.036

4. What is the value of $21 \div 30$?

(1) 0.007
(2) 0.07
(3) 0.7
(4) 7

5. Express 0.12 as a fraction in the simplest form.

(1) $\frac{3}{20}$
(2) $\frac{3}{25}$
(3) $\frac{6}{50}$
(4) $\frac{1}{12}$

6. Round off the sum of 654 and 124 to the nearest hundred.

(1) 600
(2) 700
(3) 800
(4) 900

7. Find the value of $78 - 24 \div 6 \times 4$.

(1) 78
(2) 54
(3) 36
(4) 62

8. A box can contain 9 toys. What is the least number of boxes that are needed to contain a total of 139 toys?

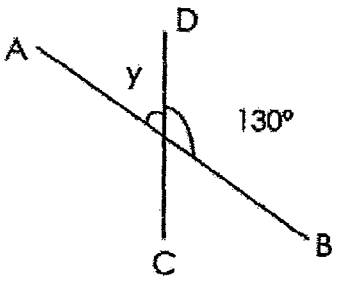
(1) 13
(2) 14
(3) 15
(4) 16

9. Some shapes are arranged in the following pattern:


Which shape is in the 68th position?

(1) 
(2) 
(3) 
(4) 

10. AB and CD are straight lines. Find $\angle y$.




(1) 50°
(2) 70°
(3) 140°
(4) 230°

11. Jane bought a 2-m long ribbon. $\frac{1}{5}$ of the ribbon was used to decorate a present and 40 cm of the ribbon was given away. What fraction of the ribbon was left?

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

12. How many whole numbers from 28 to 64 are divisible by 5?

(1) 7
(2) 6
(3) 12
(4) 18

13.

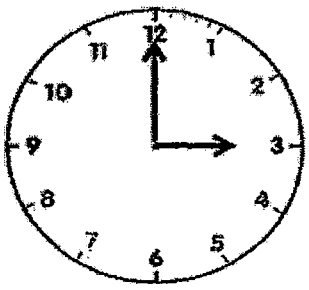
$$2 + 4 + 6 + \ldots + 16 + 18 + 20$$

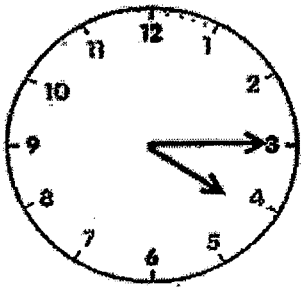
When all the even numbers from 2 to 20 are added up, what is the digit in the ones place?

(1) 0
(2) 2
(3) 6
(4) 4

14. How many right angles has the minute hand of a clock moved from 3.00 p.m. to 4.15 p.m.?

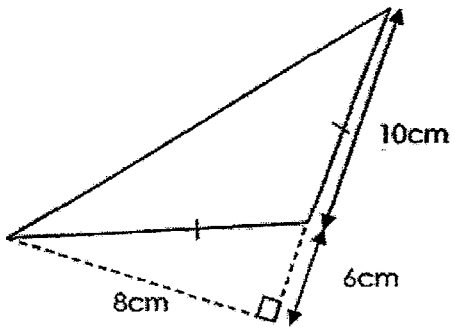
(1) 1
(2) 5
(3) 3
(4) 4




15. What is the area of the triangle shown?

(1) 24 $cm^2$
(2) 40 $cm^2$
(3) 48 $cm^2$
(4) 64 $cm^2$



**PRIMARY 5 MID-YEAR EXAMINATION 2016**

Date: 13 May 2016

# MATHEMATICS

**PAPER 1**

**(BOOKLET B)**

6. You are **not** allowed to use a calculator.

**Short Answer Questions**

Questions 16 to 25 carry 1 mark each. Write your answers in the boxes provided. For questions which require units, give your answers in the units stated. [10 marks]

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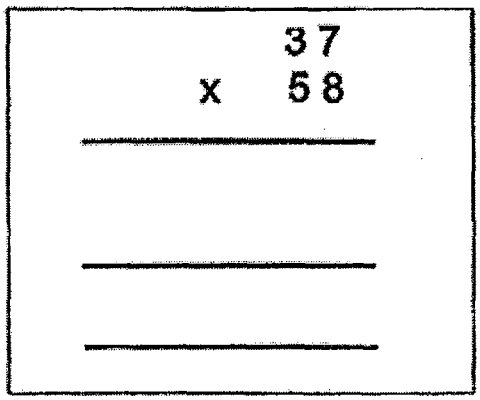
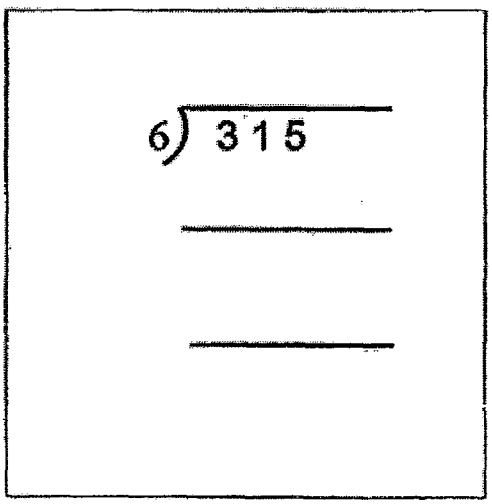
16. What is the value of 37 x 58 ?




Ans:_____

17. Find the value of 315 ÷ 6.




Ans:_____

18. How many sixths are there in $3\frac{2}{3}$ ?

Ans: _____

19. Write six million, four hundred and two thousand in numeral.

Ans: _____

20. Express 30 minutes as a fraction of two hours. Give your answer in its simplest form.

Ans: _____

21. Find the product of $\frac{7}{9}$ and $\frac{3}{4}$. Leave your answer in its simplest form.

Ans: _____

22. What is the missing number in the box?

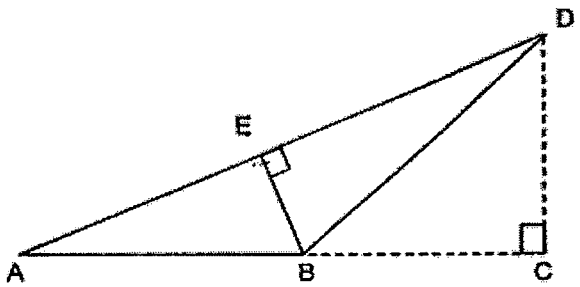
$16 \times 300 = 600 \times \boxed{?}$

Ans: _____

23. The price of a car is a 6-digit whole number.
When it is rounded to the nearest \$1000, the amount is \$120 000.
What could be the highest possible price?

Ans: \$ _____

24. In the figure below, not drawn to scale, if the base is AD, what is the height of the triangle?




Ans: _____

25. When Jill opened her book, the sum of the facing page numbers is 53.
What is the smaller page number?

Ans: _____

Questions 26 to 30 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the space provided. For questions which require units, give your answers in the units stated. [10 marks]

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26. The table shows the favourite snacks of a group of children.

| Snack | Number of Children |
|---|---|
| Fruit bar | 24 |
| Ice cream | ? |
| Potato chips | 30 |
| Cookies | 9 |

The number of children who like ice cream is 3 times that of those who like chips and cookies. How many children like ice cream?

Ans: _____

27. The parking charges at the college carpark are as follows:

| | |
|---|---|
| 6 a.m. to 6 p.m. | $1.00 per hour or part thereof |
| After 6 p.m. | $2.50 per entry |

Mr Ong parked his car from 11.15 a.m. to 6.45 p.m. on Friday.
How much was his parking charges for that day?

Ans: _____

28. At a buffet promotion, for every 2 paying adults, the third adult gets to dine for free. Mr Tan dined with 13 friends at the restaurant. How many of them dined for free?

Ans: _____

29. Farida has a mass of 42 kg. Laila's mass is $\frac{2}{3}$ of Farida's mass.

Aihua is twice as heavy as Laila. What is Aihua's weight?

Ans: _____kg

30. James left Town A by train and arrived at Town B at 7.15 a.m. The train ride took 9h 45 min. What time did he leave Town A?

Ans: _____

End of Paper

**PRIMARY 5 MID-YEAR EXAMINATION 2016**

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# MATHEMATICS

## PAPER 2

You are allowed to use a calculator.

Questions 1 to **5** carry 2 marks each. Show your working clearly in the space provided for each question 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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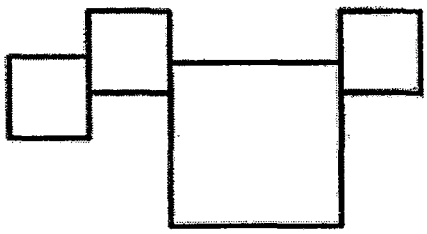
1. The figure, not drawn to scale, consists of a large square and 3 identical small squares. The side of the large square is twice the side of the small square. If the area of the small square is 4 $cm^2$, find the area of the figure.



Ans: _____ $cm^2$

2. Peter had $\frac{3}{4}$ of a cake. He gave half of it to his mother and the rest was shared equally among his 3 brothers. How much of the cake did each brother receive?

Ans: _____

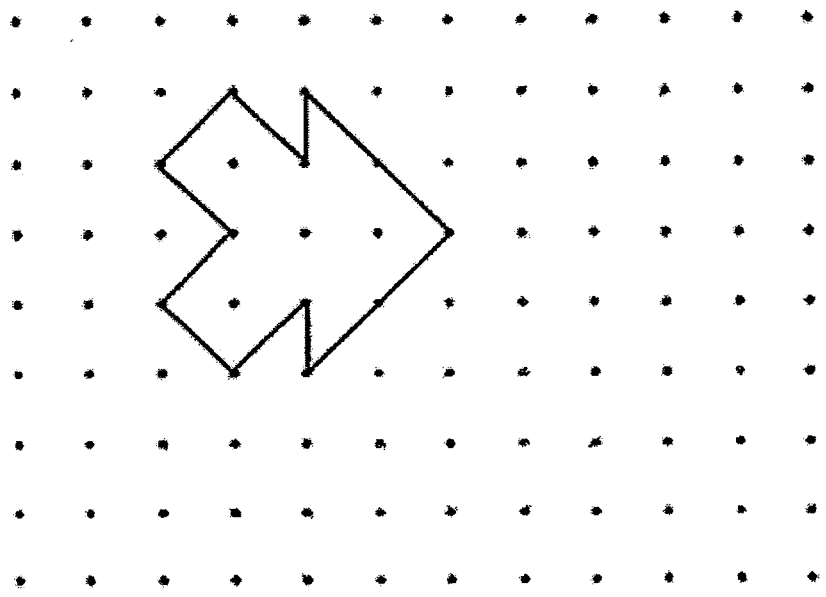
3. Ravi bought a laptop and 5 cameras.
A laptop cost thrice as much as a camera.
He paid $2 400 for the laptop and 5 cameras.
How much did a camera cost?

Ans: $_____

4. Aiden has a cardboard measuring 23 cm by 20 cm.
He wants to cut 2-cm squares from the cardboard.
What is the maximum number of 2-cm squares he can cut out?

Ans: _____

5. Draw **3** more unit shapes to form a tessellation in the space provided.



**For questions 6 to 18, show your working clearly in the space provided for each question 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.** [50 marks]

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6. Aisha bought $7\frac{4}{5}$ litres of orange juice. She sold $2\frac{2}{5}$ litres at a fair and divided the remaining orange juice equally into 9 jugs. How much orange juice was in 5 of these jugs?

Ans: _____ [3]

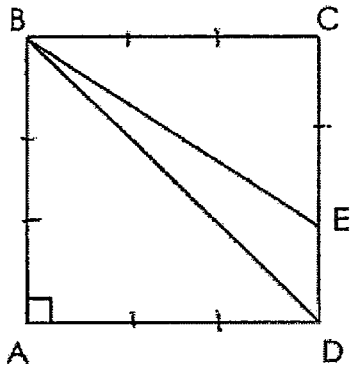
7. Bala gave some stickers to his friends. If each of his friends gets 6 stickers, he will have 5 extra stickers. If each of them gets 8 stickers, he will need 9 more stickers. Find the number of friends Bala has.

Ans: _____ [3]

8. Ting Ting spent $\frac{4}{7}$ of her salary on a bag while Mark spent $\frac{2}{5}$ of his salary on a coat. Each of them spent $500. What is the difference between Ting Ting's salary and Mark's salary?

Ans: _____[3]

9. The area of Square ABCD is 144 cm². The length of CE is twice the length of ED, what is the area of triangle BDE?




Ans: _____[3]

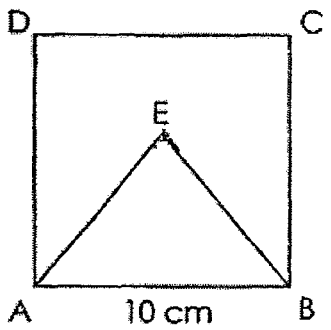
10. Mrs Tan is 3 times as old as Ben. Ben is 14 years old.

In how many years' time will she be twice as old as Ben?

Ans: _____[3]

11. The height of Triangle ABE is $\frac{3}{5}$ of the side of Square ABCD.

Find the area of Triangle ABE.




Ans: _____[3]

12. 6 mangoes and 4 peaches cost $24.

Henry bought 2 mangoes and 1 peach for $7.

(a) How much did he pay for 2 mangoes?

(b) What is the cost of a peach?

Ans: (a)_____[3]

(b)_____[1]

13. The amount of money in Box A is 6 times the money in Box C.

The money in Box B is \$4 more than $\frac{1}{4}$ of the money in Box A.

There is \$10 less in Box C than in Box B.

What is the total amount in all the boxes?

Ans: _____ [4]

14. Julie had 32 fewer cards than stamps in her collection.

$\frac{2}{3}$ of her cards was equal to $\frac{2}{7}$ of her stamps.

(a) How many stamps did she have?

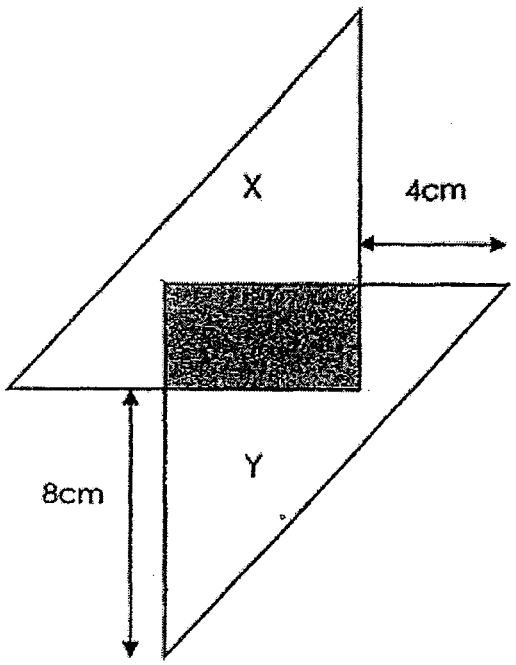
(b) Julie gave her card collection equally to 6 friends.

How many cards did each friend get?

Ans: (a) _____ [2]

(b) _____ [2]

15. The figure, not drawn to scale, is formed by 2 identical right- angled triangles, X and Y. It has an overlapping rectangular area measuring 5 cm by 3 cm. Find the area of the figure.




Ans: _____[5]

16. Contestants in a quiz were awarded certificates based on their scores.

| Types of Certificate | | |
|---|---|---|
| **Distinction** | **Merit** | **Participation** |
| 3 points | 2 points | 1 point |

A total of 312 points were awarded.

$\frac{1}{8}$ of the contestants received the Certificate of Distinction.

$\frac{4}{5}$ of the remaining contestants received the Merit Certificate and the rest received the Participation Certificate.

How many contestants received the Certificate of Distinction?

Ans: _____ [5]

17. Study the pattern carefully. Then answer the questions below.

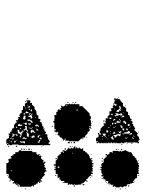


Figure 1

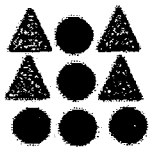


Figure 2

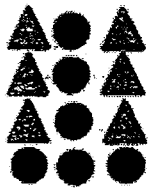


Figure 3 ...

| Figure | Number of ● | Number of ▲ |
|---|---|---|
| 1 | 4 | 2 |
| 2 | 5 | 4 |
| 3 | 6 | 6 |
| 4 | 7 | 8 |
| . . . | | |
| 8 | | |

[1]

(a) How many dots and how many triangles are there in **Figure 8** ?

(b) Which **Figure** will have 63 dots?

(c) Which **Figure** will have 200 triangles?

Ans: (b) Figure_____ [2]

(c) Figure_____ [2]

18. Mr Lim bought a total of 126 red and blue pens. $\frac{1}{3}$ of them were red. Some red pens were sold and the number of red pens remaining was $\frac{2}{9}$ of the remaining pens. How many pens were sold?

Ans: _____ [5]

**End of Paper 2**

# ANSWER SHEET

EXAM PAPER 2016 (P5)

SCHOOL : TAO NAN

SUBJECT : MATHEMATICS

TERM : SA1

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

16)2146 17)52R3 18)22 19)6 402 000 20) ¼

21)7/12 22)8 23)$120 499 24)BE 25)26

26)117 27)$9.50 28)4 adults 29)56kg 30)9.30 p.m.

Paper 2

1)$\sqrt{4} = 2$

2 x 2 = 4

4 x 4 = 16

4 x 3 = 12

16 + 12 = 28cm2

2) ¾ x ½ = 3/8

¾ - 3/8 = 3/8

3/8 ÷ 3 = 1/8

3)3 x 1 = 3

3 + 5 = 8

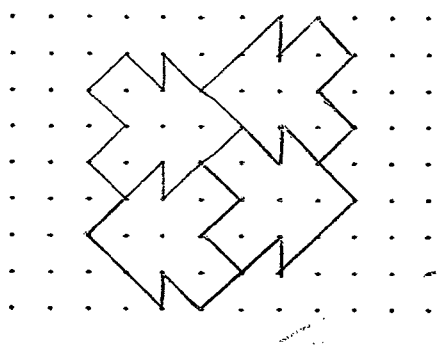
$2400 ÷ 8 = $300

4)23 ÷ 2 = 11R1

20 ÷ 2 = 10

11 x 10 = 110

5)



6)$7\frac{4}{5} - 2\frac{2}{5} = 5\frac{2}{5}$

$5\frac{2}{5} \div 9 = 3/5$

3/5 x 5 = 3L

7)Excess + Shortage

5 + 9 = 14

8 – 6 = 2

14 ÷ 2 = 7

8)$500 ÷ 4 = $125

$125 x 7 = $875

$125 x 10 = $1250

$1250 – $875 = $375

9)$\sqrt{144}$ = 12

12 ÷ 3 = 4

½ x 12 x 4 = 24cm2

10)14 x 3 = 42

42 – 14 = 28

28 x 2 = 56

56 – 42 = 14

11)10 x 3/5 = 6

½ x 10 x 6 = 30cm2

12)a)$7 x 3 = $21

$24 – $21 = $3

$7 – $3 = $4

b)$4 x 3 = $12

$24 – $12 = $12

$12 ÷ 4 = $3

13)$106

14)a)32 ÷ 4 = 8

8 x 7 = 56

b)8 x 3 = 24

24 ÷ 6 = 4

15)4 + 5 = 9

8 + 3 = 11

½ x 9 x 11 = 49.5

49.5 x 2 = 99

5 x 3 = 15

99 – 15 = 84cm2

16)20

17)a)8 x 1 + 3 = 11

8 x 2 = 16

b)63 – 3 = 60

60 ÷ 1 = 60

c)200 ÷ 2 = 100

18)126 ÷ 3 = 42

42 x 2 = 84

84 ÷ 7 = 12

12 x 2 = 24

42 – 24 = 18

15)4 + 5 = 9

8 + 3 =11

½ x 9 = 49.5

49.5 x 2 = 99

5 x 3 = 15

99 – 15 = 84cm2

16)