

HENRY PARK PRIMARY SCHOOL
2017 SEMESTRAL EXAMINATION 1
MATHEMATICS
PRIMARY 5

PAPER 1
(BOOKLET A)

Name: _____ ()

Parent's Signature

Class: Primary 5 _____

Marks:

Paper 1	Booklet A	20
	Booklet B	25
Paper 2		55
Total		100

Total Time for Booklets A and B: 1 hour

Do not turn over this page until you are told to do so.
Follow all instructions carefully.

Answer all questions.

Shade your answers in the Optical Answer Sheet (OAS) provided.
You are not allowed to use a calculator.

Booklet A:

Questions 1 to 10 carry 1 mark each. Questions 11 to 15 carry 2 marks each.

For each of the questions, four options are given. One of them is the correct answer. Choose the correct answer (1, 2, 3 or 4). Shade the correct oval on the Optical Answer Sheet provided.

(20 marks)

1. What is the missing number in the box?

$$8\,205\,000 = 8\,000\,000 + \boxed{} + 5000$$

- (1) 200 ones
- (2) 200 tens
- (3) 200 hundreds
- (4) 200 thousands

2. In 5 739 862, the digit 3 is in the _____ place.

- (1) hundreds
- (2) thousands
- (3) ten thousands
- (4) hundred thousands

3. What is the value of $32 + 8 \times 10 - (24 \div 6)$?

- (1) 80
- (2) 108
- (3) 240
- (4) 396

(Go on to the next page)

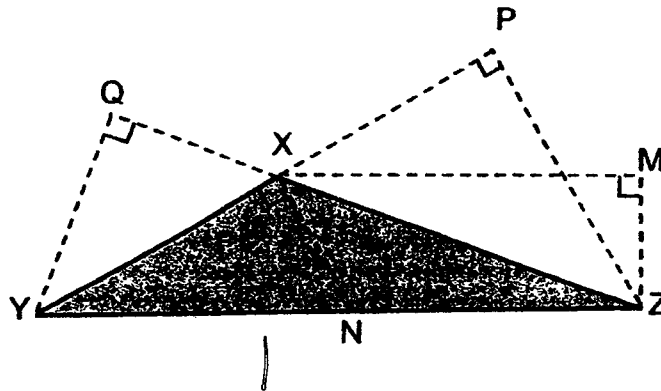
4. Arrange the following fractions from the smallest to the largest.

$$\frac{6}{5}, \quad 1\frac{1}{6}, \quad \frac{4}{3}$$

- (1) $1\frac{1}{6}, \quad \frac{6}{5}, \quad \frac{4}{3}$
 (2) $\frac{4}{3}, \quad \frac{6}{5}, \quad 1\frac{1}{6}$
 (3) $\frac{6}{5}, \quad \frac{4}{3}, \quad 1\frac{1}{6}$
 (4) $1\frac{1}{6}, \quad \frac{4}{3}, \quad \frac{6}{5}$
5. Express $\frac{7}{8}$ as a decimal. Round the answer to 1 decimal place.

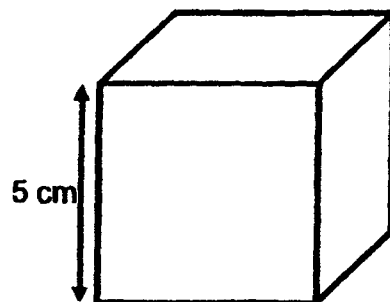
- (1) 1.1
 (2) 0.9
 (3) 0.8
 (4) 0.7

6. The figure below shows triangle XYZ. Given that XZ is the base of the triangle XYZ, what is its corresponding height?



- (1) QY
 (2) PZ
 (3) MZ
 (4) XN

7. There are 38 students in a class. 26 students wear spectacles. Find the ratio of the number of students who wear spectacles to those who do not wear spectacles.
- (1) 6 : 13
(2) 6 : 19
(3) 13 : 6
(4) 13 : 19
8. Siti and John shared some marbles in the ratio of 5 : 3. Siti had 30 marbles. How many marbles did John have?
- (1) 6
(2) 10
(3) 18
(4) 48
9. Which one of the following is the same as 8120 ml?
- (1) 8 ℓ 12 ml
(2) 8 ℓ 120 ml
(3) 81 ℓ 2 ml
(4) 81 ℓ 20 ml
10. What is the volume of a cube of side 5 cm?



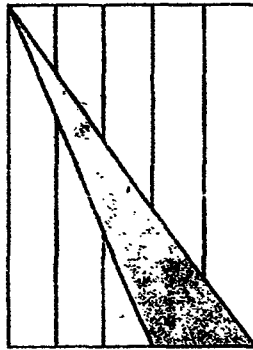
- (1) 30 cm³
(2) 75 cm³
(3) 125 cm³
(4) 150 cm³

(Go on to the next page)

11. Mr Tan has 4 cartons of oranges. There are 12 oranges in each carton. He repacked all the oranges into as many bags as possible. There are 5 oranges in each bag. How many oranges are left behind?

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

12. The figure below is made up of 5 identical rectangles. What fraction of the figure is shaded?



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

13. $14 : 18 : \boxed{?} = 21 : 27 : 24.$

What is the missing number in the box?

- (1) 8
- (2) 12
- (3) 16
- (4) 22

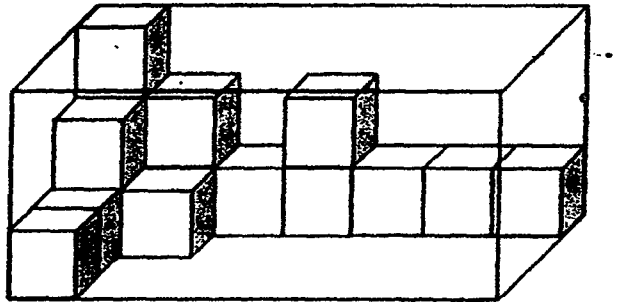
(Go on to the next page)

14. In a basket, $\frac{2}{3}$ of the fruits are oranges and the rest are apples.
 $\frac{1}{4}$ of the apples are green and the rest are red.

What fraction of the fruits in the basket are red apples?

- (1) $\frac{5}{12}$
 (2) $\frac{1}{12}$
 (3) $\frac{3}{4}$
 (4) $\frac{1}{4}$

15. Jane placed some unit cubes into a rectangular glass box as shown below. How many more unit cubes would she need to fill up the box completely?



- (1) 16
 (2) 28
 (3) 68
 (4) 84

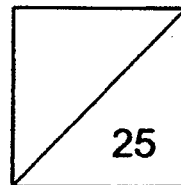
(Go on to Booklet B)

**2017 SEMESTRAL EXAMINATION 1
MATHEMATICS
PRIMARY 5**

**PAPER 1
(BOOKLET B)**

Name: _____ ()

Class: Primary 5 _____



Total Time for Booklets A and B: 1 hour

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.

You are not allowed to use a calculator.

Booklet B:

Questions 16 to 20 carry 1 mark each. Question 21 to 30 carry 2 marks each.

Write your answers in the spaces provided.

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

(25 marks)

16. Evan had some pens. He gave 35 pens to Sandra and bought another 10 pens. As a result, he was left with 16 pens. How many pens did Evan have at first?

Do not
write in
this
space

Ans: _____

17. What is the greatest possible whole number that will give 724 000 when rounded off to the nearest thousand?

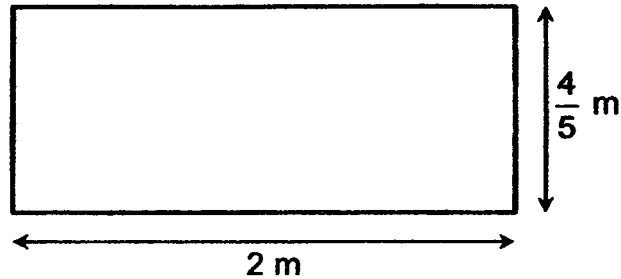
Ans: _____

18. Find the value of $1\frac{2}{3} + \frac{1}{5}$

Express your answer as a mixed number in the simplest form.

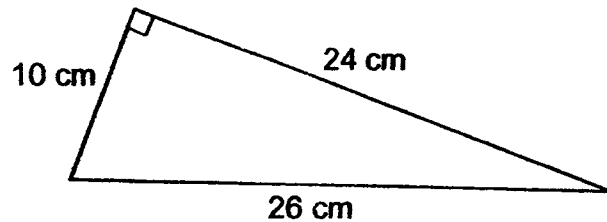
Ans: _____

19. Find the area of rectangle shown below. Express your answer as a mixed number in its simplest form.



Ans: _____ m²

20. The figure below shows a right-angled triangle. Find the area of the triangle.



Ans: _____ cm²



21. The ratio of the number of horses to the number of sheep to the number of chickens in a farm is 4 : 3 : 2. There are 144 animals altogether. How many chickens are there in the farm?

Do not
write in
this
space

Ans: _____

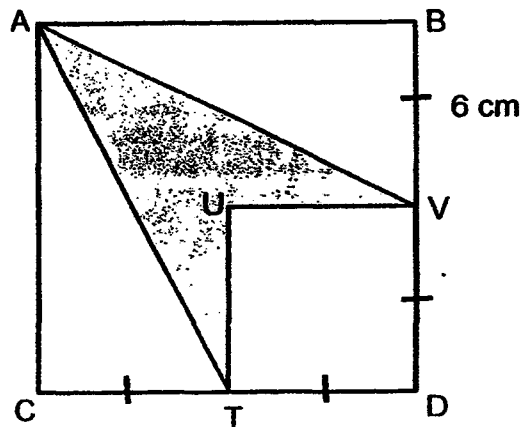
22. Jason used stickers of different shapes to make a series of same pattern. The first 10 stickers are shown below.



What is the shape of the 35th sticker? Put a tick in the box below the shape to indicate your answer.

23. In the figure below, ABCD and DTUV are squares.
Given that $BV = VD = DT = TC = 6$ cm. Find the area of the shaded part.



Do not
write in
this
space

Ans: _____ cm^2

24. More than 30 story books were shared among Aaron, Brendon and Charlie in the ratio of 3 : 9 : 4. Read each of the following statements and fill in the blanks with True or False.

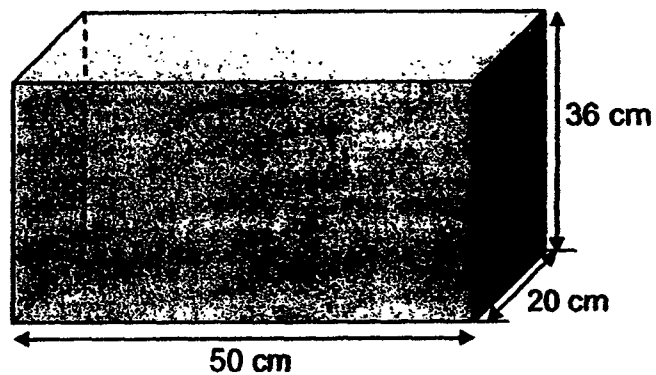
a) Brendon received only 9 story books.

b) Brendon received 3 times as many story books as Aaron.

c) For every 4 story books Charlie received, Aaron received 3 story books.

d) 48 was a possible number of storybooks shared by the three boys in the ratio given above.

25. Justin filled up the tank shown below completely with water. Find the volume of water in litres.



Do not
write in
this
space

Ans: _____

26. A bus can carry a maximum of 40 passengers. What is the least number of such buses needed to carry all 220 pupils and 30 teachers?

Ans: _____

27. Rita is 37 years old. She is 7 years younger than James. In how many years' time will the ratio of Rita's age to James' age be 6 : 7?

Do not
write in
this
space

Ans: _____

28. Natalie and Darshana made an equal number of bookmarks.

Natalie sold $\frac{1}{2}$ of her bookmarks. Darshana sold $\frac{2}{5}$ of her bookmarks.

Natalie sold 12 more bookmarks than Darshana. How many bookmarks did each girl make?

Ans: _____

29. Ricky had just enough money to buy a toy car and a toy aeroplane. He spent $\frac{1}{3}$ of his money on the toy car and the rest of his money on the toy aeroplane. Wilfred spent a total of \$168 to buy 3 such toy cars and 2 such toy aeroplanes. How much did one such toy car cost?

Do not
write in
this
space

Ans: \$ _____

30. Rayhan spent $\frac{4}{7}$ of his money on 8 identical pens. With the rest of his money, he bought another 4 such pens and some identical correction tapes. What fraction of his money was spent on the correction tapes?

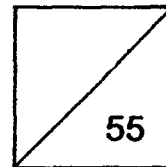
Ans: _____

End of Paper

**2017 SEMESTRAL EXAMINATION 1
MATHEMATICS
PRIMARY 5
PAPER 2**

Name: _____ ()

Class: Primary 5 _____



Time for Paper 2: 1 h 30 min

Do not turn over this page until you are told to do so.

Follow all instructions carefully.

Answer all questions.

Show your working clearly as marks are awarded for correct working.

Write your answers in this booklet.

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 space provided. For questions which require units, give your answers in the units stated.

(10 marks)

1. David and Jenny shared \$490. After David gave Jenny \$50, he still had \$10 more than Jenny. How much money did Jenny have at first?

Do not write
in this
space

Ans: \$ _____

2. The mass of 2 identical packets of salt and 3 identical packets of sugar is 3862 g. The mass of 15 such packets of salt and 3 such packets of sugar is 8490 g. What is the mass of one such packet of salt?

Ans: _____ g

(Go on to the next page)

3. Use all the digits below to form the smallest 4-digit whole number that can be completely divided by 4. Each digit can only be used once.

7

3

2

6

Do not write
in this
space

Ans: _____

4. There are some red, green and blue beads in a box. $\frac{1}{3}$ of the beads are red. There are 53 blue beads and there are 29 more green beads than red beads. How many beads are there in the box altogether?

Ans: _____

5. The ratio of the number of boys to the number of girls in the classroom at first was 5 : 6. There were 3 more girls than boys in the classroom. 7 boys and 8 girls entered the classroom. What is the ratio of the number of boys to the number of girls in the end? Express your answer in the simplest form.

Do not write
in this
space

Ans: _____

(Go on to the next page) www.sgexam.com

For questions 6 to 17, 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.

(45 marks)

6. May had three times as much money as June. May spent \$1 700.
As a result, she had \$300 less than June. How much money did May have left?

Do not write
in this
space

Ans: _____ [3]

7. William has 620 five-cent coins and twenty-cent coins in his coin collection. The total value of the coins in his collection is \$62.65. How many twenty-cent coins does William have?

Do not write
in this
space

Ans: _____ [3]

(Go on to the next page)



8. Hazel had some money. She spent $\frac{1}{6}$ of it on a wallet and $\frac{3}{5}$ of it on a watch. The watch and the wallet cost \$230 altogether. How much money did Hazel have left?

Do not write
in this
space

Ans: _____ [3]

9. Charlene, Heidi and Niran had 693 stickers altogether.

After Niran gave $\frac{3}{8}$ of her stickers to Charlene and $\frac{3}{10}$ of her remaining stickers to Heidi, the three girls had the same number of stickers in the end.

(a) What fraction of Niran's stickers were left?

(b) How many more stickers did Heidi have than Charlene at first?

Do not write
in this
space

Ans: (a) 1 [2]

(b) _____ [2]

(Go on to the next page)

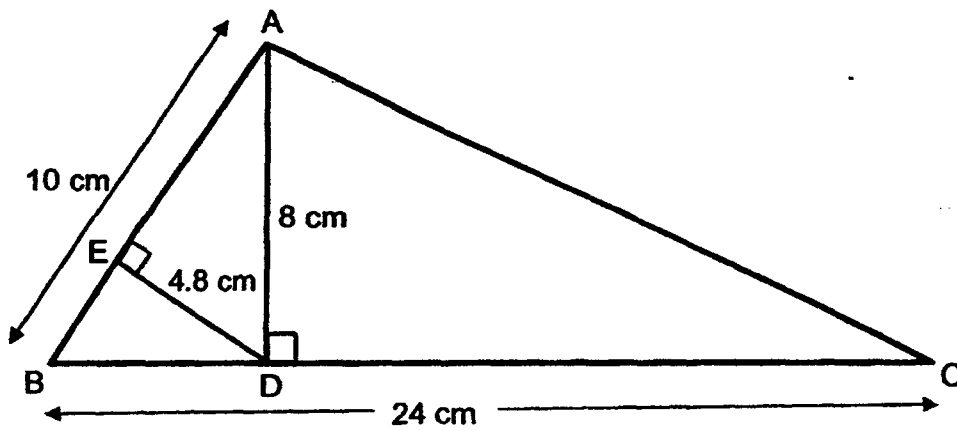
10. A baker had some eggs. He used $\frac{4}{9}$ of the eggs to bake muffins and $\frac{1}{2}$ of the remaining eggs to bake cupcakes. The rest of the eggs were used to bake cookies. He used 48 more eggs to bake muffins than cupcakes. How many eggs did the baker have at first?

Do not write
in this
space

Ans: _____ [3]

(Go on to the next page)

11. The figure below shows triangle ABC. Given that $AB = 10$ cm, $AD = 8$ cm, $BC = 24$ cm and $DE = 4.8$ cm. Find the area of triangle ACD.



Do not
write in
this
space

Ans: _____ [3]

(Go on to the next page)

12. Kathy, James and Henry share some stickers. The ratio of the number of stickers James has to the number of stickers Henry has is 1 : 4. Kathy has 7 times as many stickers as James. The three children have a total of 456 stickers. How many stickers does Kathy have?

Do not
write in
this
space

Ans: _____ [3]

13. There were 35 972 spectators at a parade. The ratio of the number of adults to the number of children at the parade was 10 : 13. There were 190 more boys than girls. How many boys were there at the parade?

Do not
write in
this
space

Ans: _____ [4]

(Go on to the next page) www.sgexam.com

14. Mrs Ng baked some pies to be packed into boxes.

- (a) If she packed 5 pies in each box, she would have 4 pies left. If she packed 9 pies in each box, she would have 8 pies left. Given that Mrs Ng baked fewer than 50 pies. How many pies did Mrs Ng bake?
- (b) The pies that Mrs Ng baked were apple and blueberry pies. After she sold 10 apple pies and 6 blueberry pies, the ratio of the number of apples pies to the number of blueberry pies became 11 : 3. Find the ratio of the number of apples pies to the number of blueberry pies at first. Express your answer in the simplest form.

Do not
write in
this
space

Ans: (a) _____ [2]

Ans: (b) _____ [3]

(Go on to the next page)

15. A rectangular tank is completely filled up with water to its brim. The ratio of the length of the tank to its breadth to its height is 9 : 7 : 13.
- (a) Given that the height of the tank is 52 cm. Find the volume of water in the rectangular tank.
- (b) James poured all the water from the rectangular tank into 2 empty containers A and B without spilling any water. After that, he found that container A had 2400 cm^3 more water than container B. Find the volume of water in container A.

Do not
write in
this
space

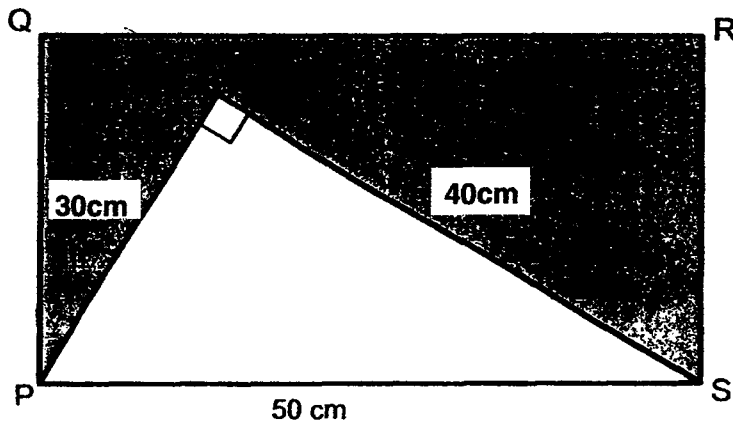
Ans: (a) _____ [3]

Ans: (b) _____ [2]

(Go on to the next page)

16. In the figure below, PQRS is a rectangle and PST is a right-angled triangle with sides measuring 30 cm, 40 cm and 50 cm. The perimeter of the shaded part is 174 cm. What is the ratio of the area of the triangle to the area of the shaded part?

Do not write in this space



Ans: _____ [4]

(Go on to the next page)

17. The ratio of the amount of money Bob had to the amount of money Jenny had was 1 : 3. After Bob spent \$385 and Jenny received \$450 from her father, Jenny had 9 times as much money as Bob. How much money did Jenny have at first?

Do not
write in
this
space

Ans: _____ [5]

-END OF PAPER-

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

Q16) 41	Q17) 724499	Q18) $1\frac{13}{15}$	Q19) $1\frac{3}{5}$	Q20) 120
Q21) 32	Q22) Flower	Q23) 36	Q24) a) False b) True c) True d) True	Q25) 36
Q26) 7	Q27) 5	Q28) 20	Q29) 24	Q30) $\frac{1}{7}$

Q1) $490 - 10 = 480$
 $480 \div 2 = 240$
 $240 - 50 = \$190$

Q2) $8490 - 3862 = 4628$
 $4628 \div 13 = 356$

Q3) 2376

Q4) $\frac{1}{3} + \frac{1}{3} + 29 + 53 = \frac{3}{3}$
 $\frac{1}{3} = 82$
 $\frac{3}{3} = 82 \times 3 = 246$

Q5) $1u = 3$
 $5 + 6 = 11$
 $11 \times 3 = 33$
 $5 \times 3 = 15$
 $6 \times 3 = 18$
 $15 + 7 : 18 + 8 = 22 : 26 = 11 : 13$

Q6) $2u = 1700 - 300 = 1400$
 $1400 \div 2 = 700$
 $700 - 300 = \$400$

- Q7) $0.2 \times 620 = 124$
 $124 - 62.65 = 61.35$
 $61.35 \div (0.20 - 0.05) = 409$
 $620 - 409 = 211$
- Q8) $5 + 18 = 23$
 $23u = 230$
 $u = 10$
 $7u = 70$
- Q9) $693 \div 21 = 33$
 $33 \times 3 = 99$
- Q10) Muffin $\rightarrow 8u$
Cupcake $\rightarrow 5u$
Cookies $\rightarrow 5u$
 $3u \rightarrow 48$
 $1u \rightarrow 16$
 $18u \rightarrow 288$
- Q11) $\frac{1}{2} \times 10 \times 4.8 = 24$
 $\frac{1}{2} \times 24 \times 8 = 96$
 $96 - 24 = 72 \text{ cm}^2$
- Q12) $456 \div 12 = 38$
 $38 \times 7 = 266$
- Q13) $35972 \div 23 = 1564$
 $1564 \times 13 = 20332$
 $20332 - 190 = 20142$
 $20142 \div 2 = 10071$
 $10071 + 190 = 10261$
- Q14) 9, 14, 19, 24, 29, 34, 39, 44, 49
17, 26, 35, 44
a) Ans: 44
 $14u \rightarrow 44 - 16 = 28$
 $1u \rightarrow 2$
 $2 \times 3 = 6$
 $2 \times 11 = 22$
 $22 + 10 = 32$
 $6 + 6 = 12$
 $32 : 12 = 8 : 3$
b) Ans: 8 : 3

- Q15) $52 \div 13 = 4$
 $4 \times 9 = 36$
 $4 \times 7 = 28$
 $52 \times 28 \times 36 = 52416$
 $52416 - 2400 = 50016$
 $50016 \div 2 = 25008$
 $25008 + 2400 = 27408$
a) 52416 cm^2
b) 27408 cm^2
- Q16) $174 - (50 + 30 + 40)$
 $54 \div 2 = 27$
 $\frac{1}{2} \times 30 \times 40 = 600$
 $27 \times 50 = 1350$
 $1350 - 600 = 750$
 $600 : 750 = 4 : 5$
- Q17) $9 \times 385 + 450 = 3915$
 $6u \rightarrow 3915$
 $U \rightarrow 652.5$
 $652.5 \times 3 = \$1957.50$

End