

PRIMARY 5 MID-YEAR EXAMINATION 2017

Name : _____ () Date: 12 May 2017

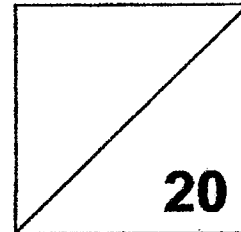
Class : Primary 5 ()

Time: 8.00 a.m. - 9.00 a.m.

Parent's Signature : _____

Paper 1 comprises 2 booklets, A and B.

**MATHEMATICS
PAPER 1
(BOOKLET A)**



INSTRUCTIONS TO CANDIDATE

1. Write your name, class and register number.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Shade your answers in the Optical Answer Sheet (OAS) provided.
6. You are **not** allowed to use a calculator.

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.
Make your choice (1, 2, 3 or 4).

Shade the oval (1, 2, 3 or 4) on the Optical Answer Sheet.

(20 marks)

1. Which one of the following has the digit 2 in the ten thousands place?

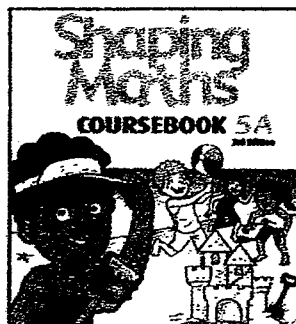
- (1) 248 703
- (2) 307 284
- (3) 423 078
- (4) 732 480

2. Which one of the following is equal to 5 : 6?

- (1) 10 : 12
- (2) 10 : 11
- (3) 11 : 12
- (4) 25 : 36

3. What is the estimated mass of one Mathematics coursebook?

- (1) 4000 g
- (2) 400 g
- (3) 40 g
- (4) 4 g



4. Which of the following is not equal to 0.6?

- (1) $\frac{36}{60}$
- (2) $\frac{15}{25}$
- (3) $\frac{12}{20}$
- (4) $\frac{5}{30}$

5. Which one of the following shows 59×95 ?

- (1) $50 \times 9 + 90 \times 5$
- (2) $50 \times 9 \times 90 \times 5$
- (3) $50 \times 95 + 9 \times 95$
- (4) $50 + 95 \times 9 + 95$

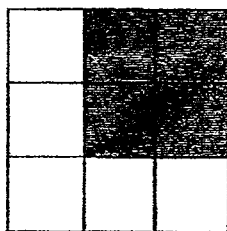
6. Express $1\frac{5}{9}$ as a decimal correct to 2 decimal places.

- (1) 0.55
- (2) 0.56
- (3) 1.55
- (4) 1.56

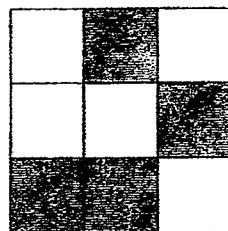
7. Find the value of $91 - 11 + 40 \div (8 \times 5) =$

- (1) 75
- (2) 80
- (3) 81
- (4) 105

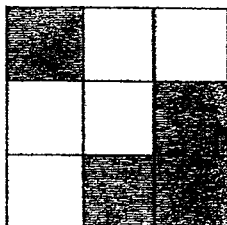
8. Each tile consists of 9 squares. Every tile has 4 shaded squares. Which tile does **not** have a symmetric pattern?



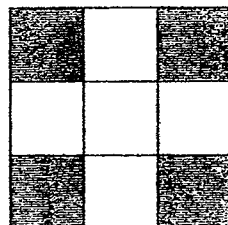
(1)



(2)

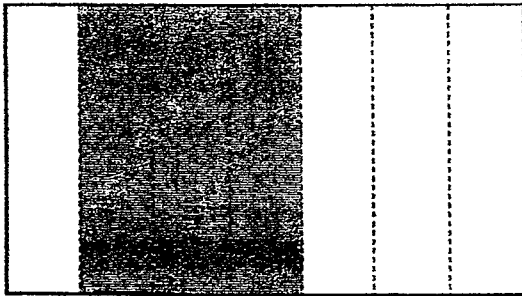


(3)

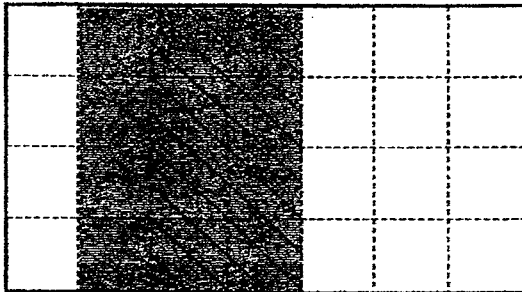


(4)

9. A rectangular piece of paper is folded into sevenths and partially shaded.



The same piece of paper is then folded into quarters and stripes drawn over some of the shaded area.



Which of the following shows the fraction of the piece of paper that has stripes drawn over the shaded area?

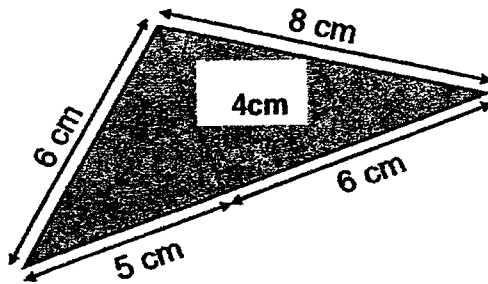
(1) $\frac{8}{12} \times \frac{3}{7}$

(2) $\frac{8}{28} \times \frac{3}{7}$

(3) $\frac{12}{8} \times \frac{3}{7}$

(4) $\frac{12}{28} \times \frac{3}{7}$

10. Find the area of the shaded triangle.



- (1) 22 cm^2
 (2) 24 cm^2
 (3) 33 cm^2
 (4) 44 cm^2
11. Shaun's weekly pocket money is \$15. His savings from Monday to Friday are shown in the table:

	Monday	Tuesday	Wednesday	Thursday	Friday
Savings	50¢	\$1.00	\$1.50	\$1.00	\$2.00

Find the ratio of Shaun's savings from Monday to Friday to his weekly pocket money.

- (1) $2 : 5$
 (2) $3 : 5$
 (3) $5 : 2$
 (4) $5 : 3$
12. Devi uses 2 l of water to water some potted plants from Monday to Friday. Each plant receives 100 ml of water. How many potted plants are there?

- (1) 400
 (2) 200
 (3) 20
 (4) 4

13. Raj had $\frac{3}{4}$ m of wire. He used $\frac{2}{5}$ of it. How much wire had Raj left?
- (1) $\frac{6}{20}$ m
- (2) $\frac{7}{20}$ m
- (3) $\frac{9}{20}$ m
- (4) $1\frac{3}{20}$ m
14. Kalar and her 5 friends shared a packet of stickers. Each of them received 20 stickers. There were 4 stickers remaining. Which of the following represents the total number of stickers in the packet?
- (1) $20 \times 5 + 4$
- (2) $20 \times 6 + 4$
- (3) $(20 + 4) \times 5$
- (4) $(20 + 4) \times 6$
15. Mrs Koh marked $\frac{1}{3}$ of her books in the morning and $\frac{1}{4}$ of them in the afternoon. She marked the remaining 35 books in the evening. How many books did Mrs Koh mark in all?
- (1) 84
- (2) 70
- (3) 60
- (4) 42

- End of Booklet A -

Questions 16 to 20 carry 1 mark each. Write your answers in the spaces provided.
For questions which require units, give your answers in the units stated. (5 marks)

16. Write 8 012 040 in words.

Ans: _____

17. $538\,612 = 530\,000 + \underline{\hspace{2cm}} + 12$

Ans: _____

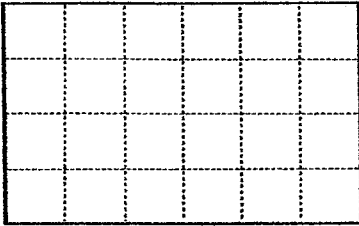
18. Sally has some beans as shown in the table.

Green beans	Red beans	Black beans
120	280	160

Find the ratio of the number of black beans to the number of red beans to the number of green beans. Express the ratio in its simplest form.

Ans: _____

19. Shade $\frac{5}{8}$ of the rectangle.

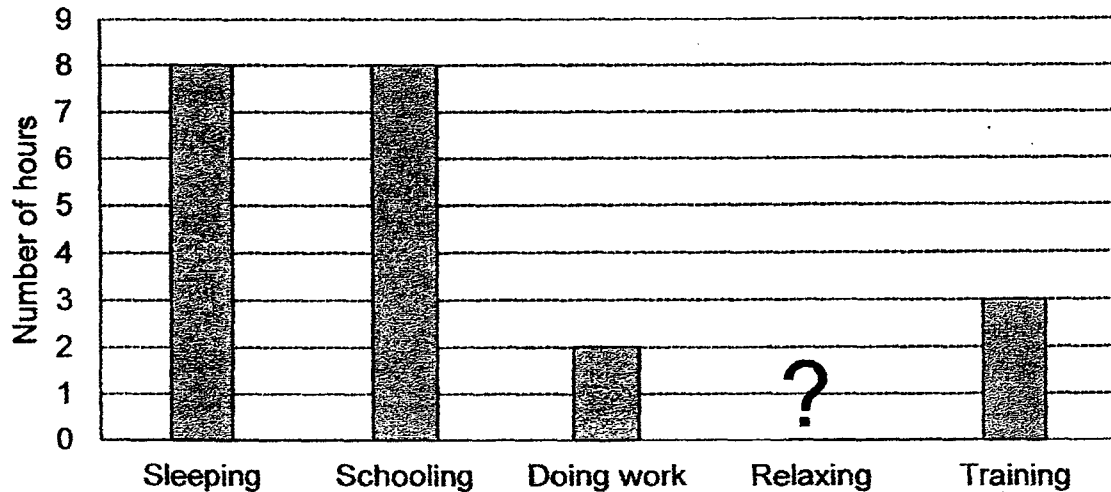


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20. Each table in a function hall seats 12 guests. There are a total of 1440 chairs. How many tables are there at the function hall?

Ans: _____

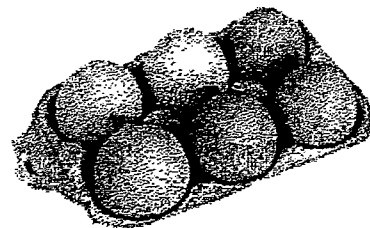
Questions 21 to 30 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided.
For questions which require units, give your answers in the units stated. (20 marks)

21. The bar graph shows the amount of time Peter spent on various activities in a day. What fraction of the day did Peter spend relaxing? Express your answer in simplest form.



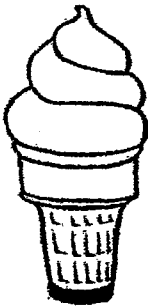
Ans: _____

22. Mrs Lim had to pack 100 eggs in cartons. The picture shows a carton with 6 eggs. How many cartons did Mrs Lim need?



Ans: _____

23. Janah used the following recipe to make chocolate ice cream for 20 friends.



Chocolate Ice Cream Recipe

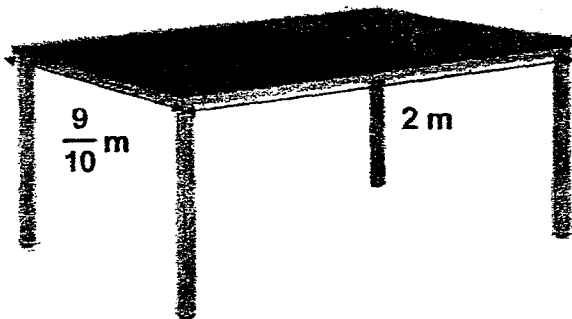
(Makes 10 single scoops)

40 g cocoa powder
3 cups light cream
1 cup heavy cream
8 egg yolks
250 g sugar
2 teaspoons vanilla extract

Each friend had 2 scoops of chocolate ice cream. How much cocoa powder did Janah use?

Ans: _____ 9

24. $\frac{2}{3}$ of a rectangular tabletop is covered with paper.
Find the area of the tabletop covered by paper.



Ans: _____ m²

25. Use all the following digits to form the smallest number that is divisible by 5.

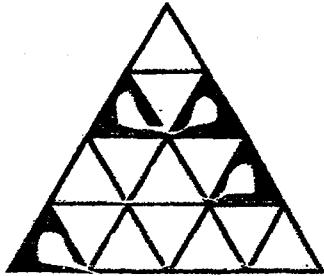
4, 7, 5, 0, 9, 8

Ans: _____

26. A drink stallholder took 5 seconds to serve a pupil. Ming bought his drink and left the queue after 1 minute. How many pupils were in front of Ming when he joined the queue?

Ans: _____

27. The diagram shows a big equilateral triangle made up of similar smaller equilateral triangles.
The shaded area of the big equilateral triangle is 28 cm^2 .
What is the area of the big triangle?



Ans: _____ cm^2

28. What is the sum of all the even numbers that are less than 50?

$$2 + 4 + 6 + \dots + 44 + 46 + 48$$

Ans: _____

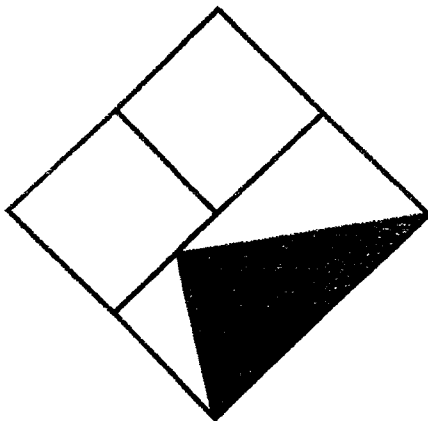
29. The table below shows the charges at a car park.

First hour	\$1.20
Every additional $\frac{1}{2}$ hour or part thereof	\$0.60

Mr Tan parked his car at the car park from 9 a.m. to 11.15 a.m.
How much were the parking charges?

Ans: _____

30. A big square is formed with 2 identical squares and 1 rectangle.
The area of the shaded part is 36 cm^2 .
Find the length of the rectangle.



Ans: _____ cm

End of Booklet B

End of Paper 1

PRIMARY 5 MID-YEAR EXAMINATION 2017

Name : _____ (.) Date: 12 May 2017 .

Class : Primary 5 (.)

Time: 8.00 a.m. - 9.00 a.m.

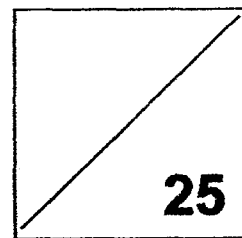
Parent's Signature : _____

Paper 1 comprises 2 booklets, A and B.

MATHEMATICS

PAPER 1

(BOOKLET B)



INSTRUCTIONS TO CANDIDATE

1. Write your name, class and register number.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Write your answers in this booklet.
6. You are **not** 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)

1. The table shows the consultation fee of 5 clinics.

Clinic	Consultation Fee
A	\$20
B	\$45
C	\$30
D	\$25
E	\$40

The combined consultation fee of Clinic _____ and Clinic _____ is twice that of Clinic C.

Ans: _____ and _____

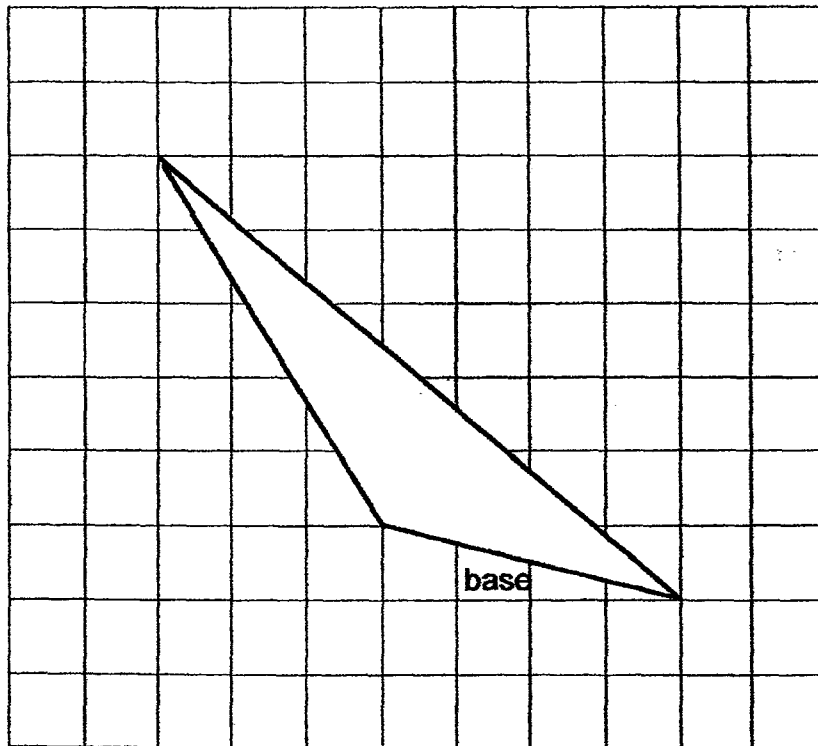
2. A school with 48 classes aims to collect 1000 kg of empty cans and plastic bottles in a year. What is the mass of empty cans and plastic bottles to be collected by each class in a month? Express your answer as a decimal rounded to the nearest hundredth.

Ans: _____ kg

3. In a camp, the ratio of the number of teachers to the number of pupils is 1 : 20. There are 351 pupils at the camp. Find the least number of teachers needed to be at the camp.

Ans: _____

4. Use dotted lines to indicate the height of the triangle in the diagram. Label the height of the triangle in relation to the given base.



5. Complete the number pattern.

2, 6, 24, _____, 720, 5040, 40 320

Ans: _____

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. Mrs Ong is 5 times as old as her grandson. Their total age 5 years ago was 86 years. How old is Mrs Ong now?

Ans: _____ [3]:

7. Ray and Tom had the same number of stickers. After Ray lost 10 stickers and Tom bought another 200 stickers, Ray had $\frac{1}{4}$ as many stickers as Tom. How many stickers did each boy have at first?

Ans: _____ [3]

8. At a school concert, $\frac{1}{6}$ of the audience are teachers. $\frac{2}{5}$ of the remaining audience are boys and the rest are girls. There are 65 fewer boys than girls. How many more pupils than teachers are there?

Ans: _____ [3]

9. The table below shows the number of steps Faizal walked from January to June. He walked a total of 1 850 000 steps.

Month	Number of steps
January	386 100
February	463 300
March	
April	336 600
May	470 000
June	

The number of steps he walked in March was the same as that in June. Find the number of steps Faizal walked in March.

Ans: _____ [3]

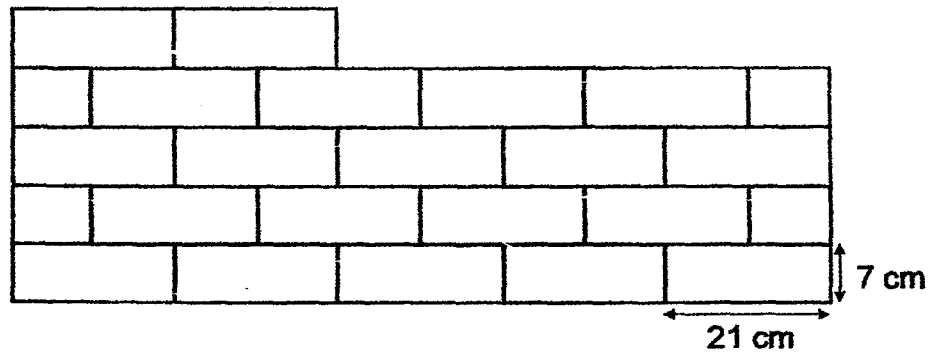
10. When May dropped a ball from a height, it rebounded $\frac{1}{4}$ the height of the previous bounce. The ball rebounded to a height of 2.5 cm on the third rebound. How high did May drop the ball from?

Ans: _____ [3]

11. Sammy has some fifty-cent and twenty-cent coins. The value of twenty-cent coins is the same as fifty-cent coins. He has a total of 28 coins. How much money does Sammy have?

Ans: _____ [3]

12. The diagram shows part of a rectangular wall built by Mr Ng using identical bricks.



- (a) Find the ratio of the length of a brick to its height.
- (b) How many more bricks does Mr Ng need to build a wall that is 1.4 m high?

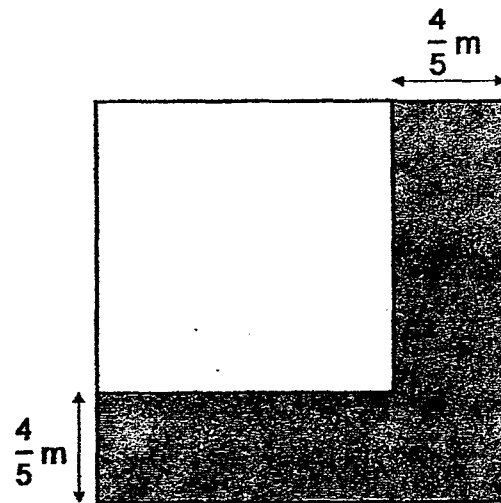
Ans: (a) _____ [1]

(b) _____ [3]

13. Ling has a bag of 910 flower petals plucked from roses and sunflowers. Each rose has 20 petals and each sunflower has 34 petals. There are 110 fewer rose petals than sunflower petals. How many flowers has Ling plucked the petals from?

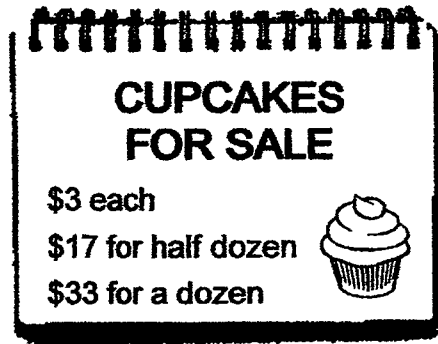
Ans: _____ [4]

14. Mrs Tang wanted to make an L-shaped concrete path for part of her square garden. The area of the garden not covered by the path was 64 m^2 . Find the perimeter of the concrete path.



Ans: _____ [4]

15. Mohan's mother gave him just enough money to purchase 12 donuts at 6 for \$11. Mohan decided to buy cupcakes instead after seeing the poster below.

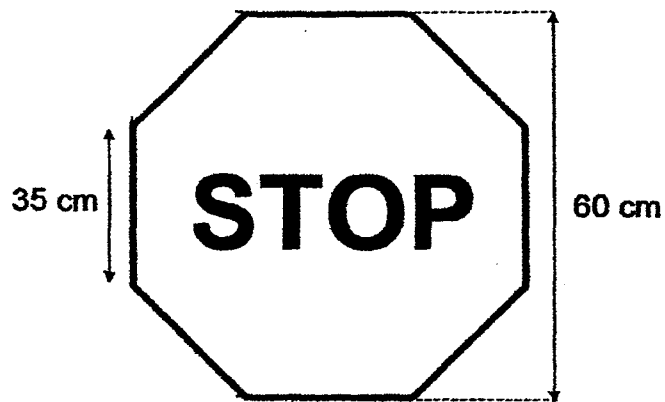


- (a) What was the most number of cupcakes Mohan could buy with the money he had?
- (b) Mohan wanted to buy 15 cupcakes to share with his cousins. He had to ask his mother for more money. What was the least amount of money Mohan needed to ask from his mother?

Ans: (a) _____ [2]

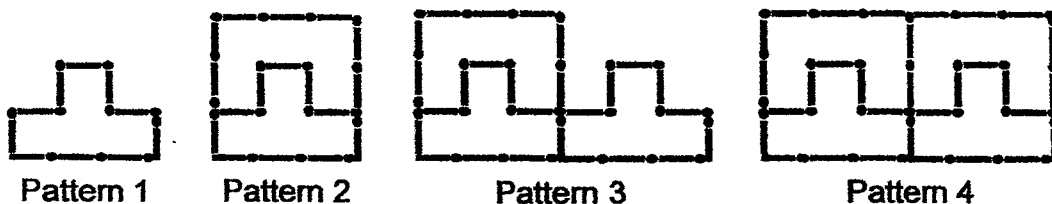
(b) _____ [3]

16. The traffic sign has 8 equal sides. Find the total area of the sign.



Ans: _____ [5]

17. The patterns below are formed using matchsticks.



Pattern	Number of matchsticks
1	10
2	17
3	26
4	31
5	(a) _____ [1]
6	(b) _____ [1]

- (a) Fill in the number of matchsticks used in Pattern 5.
 (b) Fill in the number of matchsticks used in Pattern 6.
 (c) Which Pattern number requires 96 matchsticks?

Ans: (c) _____ [3]

School: Tao Nan
 Level: P5
 Subject: Maths
 Term: SA1
 Year: 2017

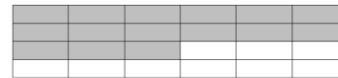
Q1	Q2	Q3	Q4	Q5
3	1	2	4	3
Q6	Q7	Q8	Q9	Q10
4	3	2	1	1
Q11	Q12	Q13	Q14	Q15
1	3	3	2	1

Q16) Eight million, twelve thousand and forty

Q17) 8600

Q18) 4 : 7 : 3

Q19)



Q20) 120

Q21) $\frac{1}{8}$

Q22) 17

Q23) 160g

Q24) $1\frac{1}{5} \text{ m}^2$

Q25) 407895

Q26) 11

Q27) 112 cm²

Q28) 600

Q29) \$3.00

Q30) 12 cm

Paper 2

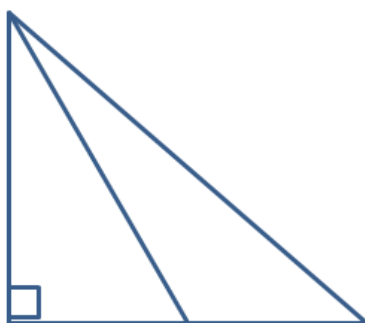
Q1) \$30 x 2 = \$60
 \$20 + \$40 = \$60

Ans: A and E

Q2) 1000 ÷ 48 = 20.83
 20.83 ÷ 12 ≈ 1.7361
 1.7361 ≈ 1.74 kg

Q3) T : P
 1 : 20
 351 ÷ 20 = 17.55
 17.55 ≈ 18

Q4)

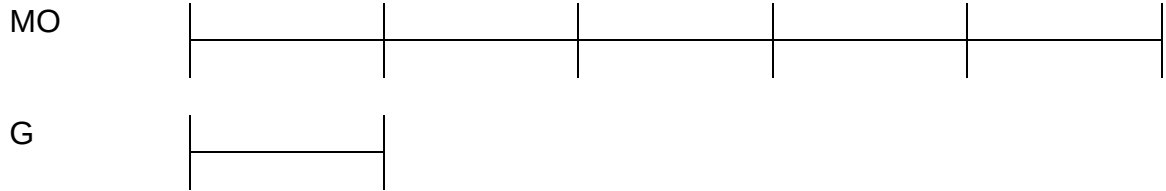


baseline

Q5) 2, 6, 24, __, 720, 5040, 40 320
x3 x4 x5 x6 x7 x8

Ans: 120

Q6)



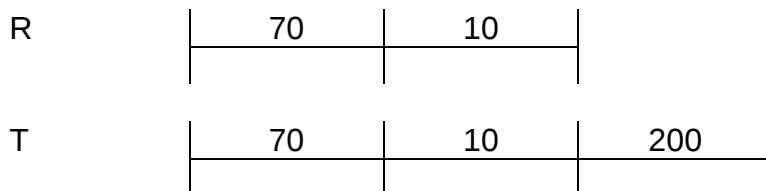
$$5 + 5 = 10$$

$$86 + 10 = 96$$

$$96 \div 6 = 16$$

$$16 \times 5 = 80 \text{ years old}$$

Q7)

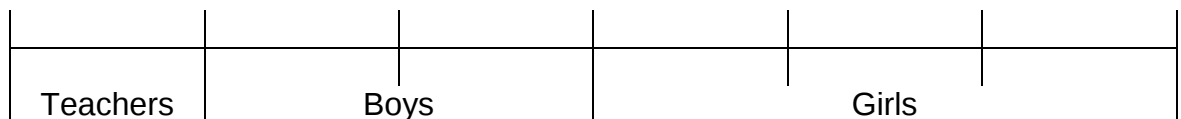


$$10 + 200 = 210$$

$$210 \div 3 = 70$$

$$70 + 10 = 80 \text{ stickers}$$

Q8)



$$65 \times 5 = 325$$

$$325 - 65 = 260$$

Q9) $386\,100 + 463\,300 + 336\,600 + 470\,000 = 1\,656\,000$

$$1\,850\,000 - 1\,656\,000 = 194\,000$$

$$194\,000 \div 2 = 97\,000 \text{ steps}$$

Q10) Rebound height on second

$$\text{Bounce} = 2.5 \text{ cm} \times 4 = 10 \text{ cm}$$

$$\text{Rebound height on first} = 40 \text{ cm}$$

$$\text{Height ball was dropped from} = 40 \text{ cm} \times 4 = 160 \text{ cm}$$

Q11) $5 \times \$0.20 = 2 \times \0.50

$$\text{Number of coins in 1 set} = 5 + 2 = 7$$

$$\text{Number of sets} = 28 \div 7 = 4$$

$$\text{Amount of money} = (4 \times 5 \times \$0.20) + (4 \times 2 \times \$0.50) = \$8$$

- Q12) a) L : H
21 : 7
3 : 1
- b) Layers of bricks needed
= $140 \text{ cm} \div 7 \text{ cm} = 20$
Number of bricks need
= $20 \times 5 = 100$
Number of bricks to complete wall
= $100 - 4 \times 5 - 2 = 78$

- Q13) 2 units of rose petals = $910 - 110 = 800$
No of roses = $800 \div 2 \div 20 = 20$

$$\text{No. of sunflowers} = (910 - 20 \times 20) \div 34 = 15$$

$$\text{Total no. of flowers} = 20 + 15 = 35$$

- Q14) $\sqrt{64} = 8$
 $8 + \frac{4}{5} = 8\frac{4}{5}$
 $8\frac{4}{5} \times 2 = 17\frac{3}{5}$
 $\frac{4}{5} \times 2 = 1\frac{3}{5}$
 $1\frac{3}{5} + 17\frac{3}{5} = 19\frac{1}{5}$
 $8 \times 2 = 16$
 $19\frac{1}{5} + 16 = 35\frac{1}{5} \text{ m}$

- Q15) a) $\$11 \times 2 = \22
Cost of 6 cupcakes = $\$22 - \$17 = \$5$
Cost of 1 cupcake = $\$5 - \$3 = \$2$
 $6 + 1 = 7$ cupcakes
- b) least cost of 15 cupcakes
= $\$33 + \$3 \times 3 = \$42$
Amount of money to be asked for
= $\$42 - \$22 = \$20$

- Q16) $60 - 35 = 25$
 $25 \div 2 = 12\frac{1}{2}$
 $12\frac{1}{2} \times 12\frac{1}{2} \times \frac{1}{2} = 78\frac{1}{8}$
 $78\frac{1}{8} \times 4 = 312\frac{1}{2}$
 $60 \times 60 = 3600$
 $3600 - 312\frac{1}{2} = 3287\frac{1}{2} \text{ m}^2$

Q17) a) No of matchsticks used in pattern 5

$$= 31 + 9 = 40$$

b) No of matchsticks used in pattern 6

$$= 40 + 5 = 45$$

c) Consistent pair increase from pattern 3

$$= 9 + 5 = 14$$

$$\text{No of matchsticks from pairs of pattern} = 96 - 26 = 70$$

$$\text{No of pair of pattern} = 70 \div 14 = 5$$

$$\text{Pattern no} = 3 + 5 \times 2 = 13$$

End