



AI TONG SCHOOL

2020

END-OF-YEAR EXAMINATION

PRIMARY 5

MATHEMATICS

Paper 1

(Booklets A and B)

DURATION : 1 h

DATE : 3 November 2020

INSTRUCTIONS

Do not open the booklet until you are told to do so.

Follow all instructions.

Answer all questions.

You are not allowed to use a calculator.

Name : _____ () Marks :

Class : Primary 5 _____

Parent's Signature : _____

Date : _____

Paper 1	45
Paper 2	55
Total	100

Paper 1 Booklet A

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) and shade your answer on the Optical Answer Sheet.

(20 marks)

1 What is the value of the digit 7 in 397 014?

- (1) 70
- (2) 700
- (3) 7000
- (4) 70 000

2 Which of the following is equivalent to $163\,200 \div 200$?

- (1) $163\,200 \div 2 \times 100$
- (2) $163\,200 \times 2 \div 100$
- (3) $163\,200 \times 100 \times 2$
- (4) $163\,200 \div 100 \div 2$

3 How many thirds are there in $6\frac{2}{3}$?

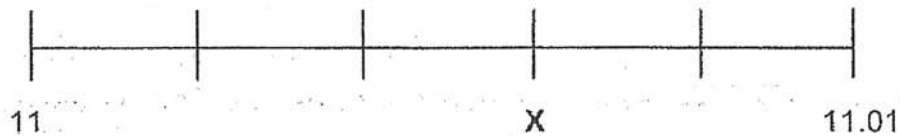
- (1) 62
- (2) 20
- (3) 18
- (4) 15

- 4 Arrange the following from the smallest to the largest in value.

1.03 ,	$1\frac{3}{5}$,	1.35
--------	------------------	------

- | | <u>Smallest</u> | | <u>Largest</u> |
|-----|------------------|------------------|----------------|
| (1) | 1.03 , | 1.35 , | $1\frac{3}{5}$ |
| (2) | $1\frac{3}{5}$, | 1.03 , | 1.35 |
| (3) | 1.03 , | $1\frac{3}{5}$, | 1.35 |
| (4) | 1.35 , | 1.03 , | $1\frac{3}{5}$ |

- 5 In the number line below, what value does the letter X stand for?



- (1) 11.003
(2) 11.006
(3) 11.03
(4) 11.06

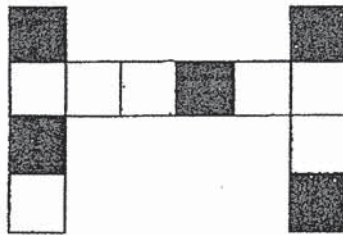
- 6 The area of a square is 36 cm^2 . What is its perimeter?

- (1) 6 cm
(2) 9 cm
(3) 24 cm
(4) 81 cm

- 7 There are 50 teachers in Changi Primary School. 38 of them are female. What percentage of the teachers are female teachers?

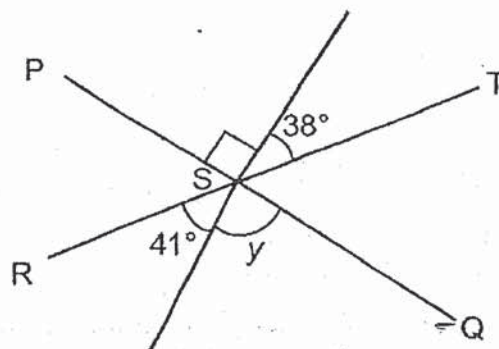
- (1) 24%
- (2) 38%
- (3) 62%
- (4) 76%

- 8 Yong Qing drew a figure with 12 identical squares. He shaded 5 squares. What is the least number of squares that he still needed to shade so that the figure has a line of symmetry?



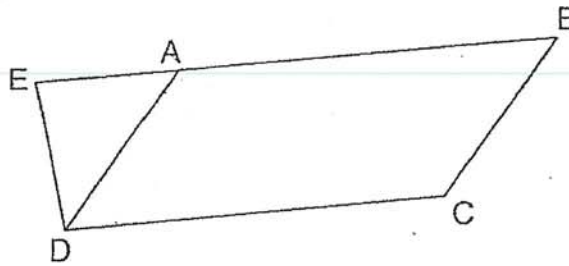
- (1) 1
- (2) 2
- (3) 3
- (4) 4

- 9 In the figure, all the lines meet at point S. PSQ and RST are straight lines. Find $\angle y$.



- (1) 128°
- (2) 90°
- (3) 87°
- (4) 52°

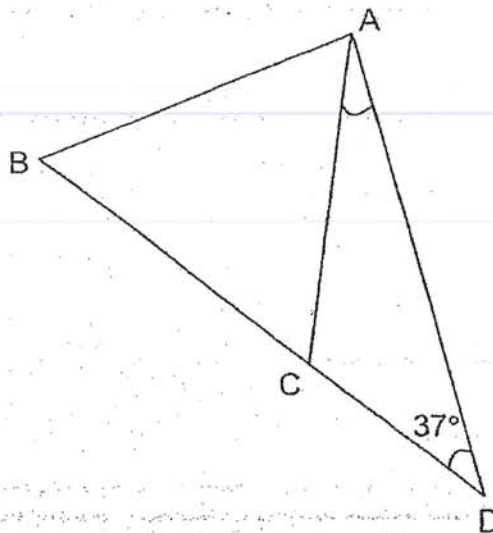
- 10 In the figure below, BCDE is a trapezium and ABCD is a parallelogram.



Which of the following statements is true?

- (1) $\angle BAD + \angle ADC = 180^\circ$
- (2) $\angle BCD + \angle EDC = 180^\circ$
- (3) $\angle AED = \angle BCD$
- (4) $\angle EDA = \angle EAD$

- 11 In the figure below, ABC is an equilateral triangle and BCD is a straight line. $\angle ADC = 37^\circ$. Find $\angle CAD$.



- (1) 60°
- (2) 53°
- (3) 37°
- (4) 23°

- 12 Jolene cut a ribbon 10.8 m long into three pieces. The first piece is 2 times as long as the second piece. The second piece is 3 times as long as the third piece. How long is the first piece?

- (1) 7.20 m
- (2) 6.48 m
- (3) 2.16 m
- (4) 1.08 m

- 13 A pencil case contains markers of three different colours. The ratio of the number of black markers to the number of the other markers is 1 : 3. The ratio of the number of purple markers to the number of red markers is 2 : 3. What is the ratio of the number of black markers to the number of purple markers?

- (1) 1 : 2
- (2) 1 : 3
- (3) 5 : 6
- (4) 5 : 9

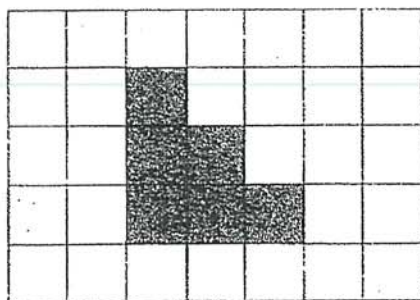
- 14 The table shows the postal charges for sending a parcel to Country A.

Mass of parcel	Charge
Up to 8 kg	\$9 per kg
Every additional kilogram	\$11 per kg

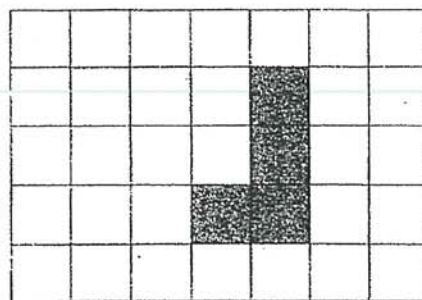
How much does it cost to send a parcel weighing 12 kg to Country A?

- (1) \$132
- (2) \$116
- (3) \$83
- (4) \$53

- 15 Zhi Qiang stacked 8 unit cubes and glued them together to form a solid. He then drew the front and side views of the solid by shading squares in a square grid as shown.

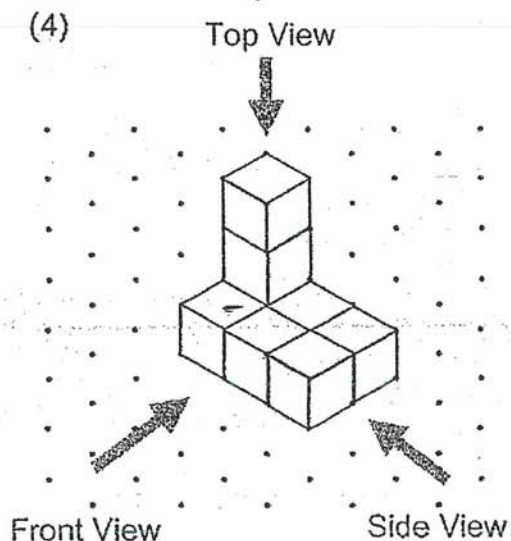
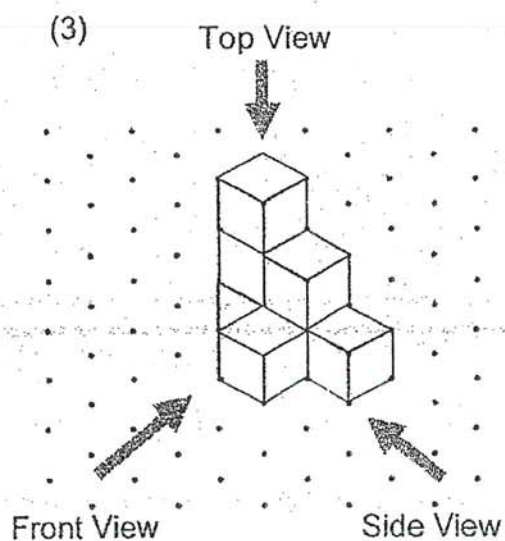
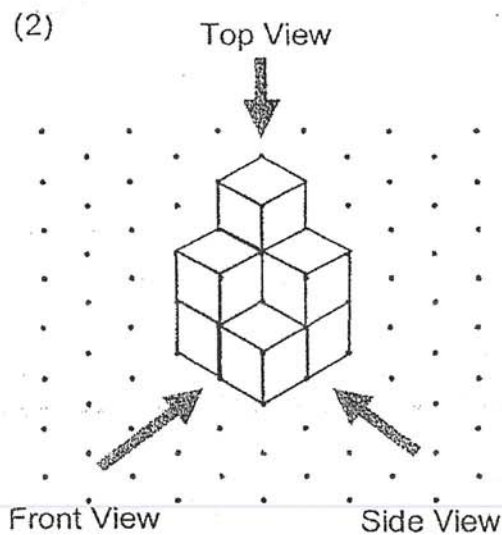
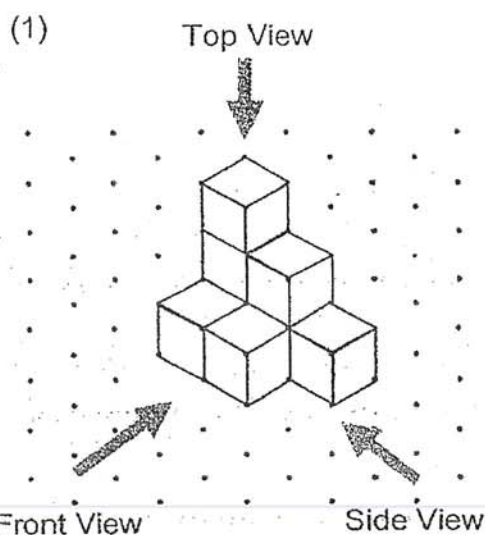


Front view



Side view

Which of the following shows the solid that Zhi Qiang formed?





AI TONG SCHOOL

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PRIMARY 5

MATHEMATICS

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DURATION : 1 h

DATE : 3 November 2020

INSTRUCTIONS

Do not open the booklet until you are told to do so.

Follow all instructions.

Answer all questions.

You are not allowed to use a calculator.

Name : _____ () Marks :

Class : Primary 5 _____

Parent's Signature : _____

Date : _____

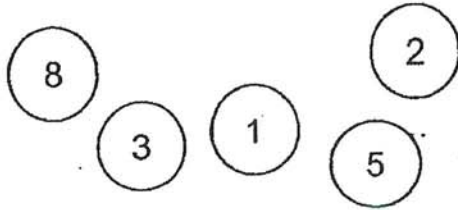
Paper 1	45
Paper 2	55
Total	100

Booklet B

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 Form the smallest 5-digit odd number using all the digits below.



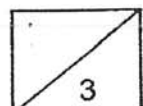
Ans: _____

- 17 Find the value of $88 + 12 \times 8 \div 4$.

Ans: _____

- 18 Find the value of $20.2 - 3.85$.

Ans: _____



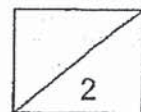
19 What is the missing number in the \square ?

$$7 : \square = 3 : 18$$

Ans: _____

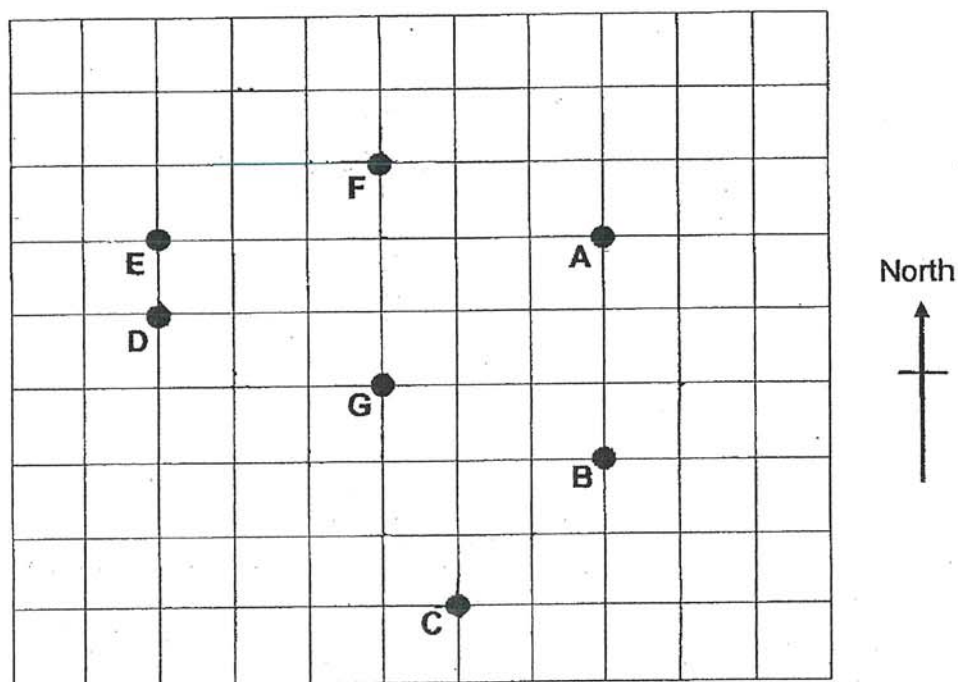
20 Mr Goh bought $\frac{11}{12}$ kg of sugar. He used $\frac{2}{5}$ of it to bake some tarts.
How much sugar did he have left? Give your answer as a fraction in the simplest form.

Ans: _____ kg



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)

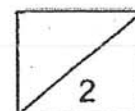
- 21 For a Treasure Hunt activity, seven checkpoints were marked out as shown in the square grid below. A is north of B.



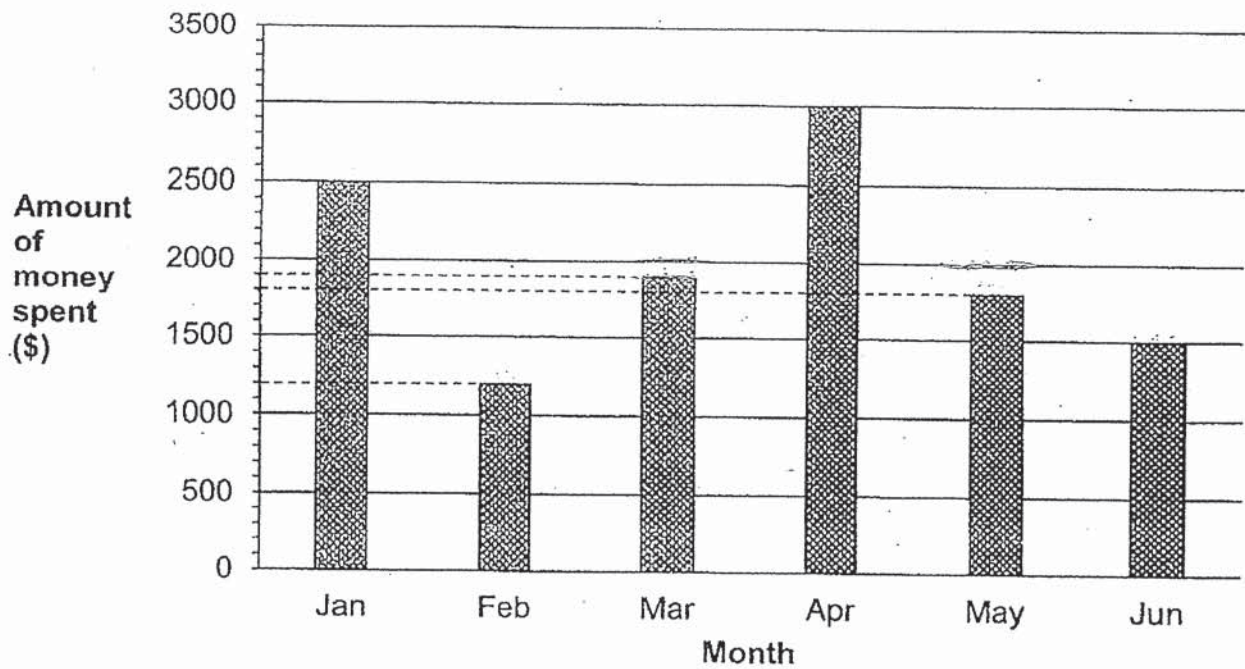
- (a) In which direction is G from F?
- (b) Sam is at one of the checkpoints. He is facing B. When he turns 90° anti-clockwise, he faces D. Which checkpoint is Sam at?

Ans: (a) _____

(b) _____



- 22 The bar graph below shows the amount of money Sarah spent from January to June.

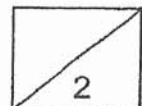


Sarah earned the same amount of money every month. She saved any amount that was not spent into her bank account.

- (a) In which month did she save the most amount of money?
- (b) In which month did she spend \$700 less than the amount she spent in January?

Ans: (a) _____

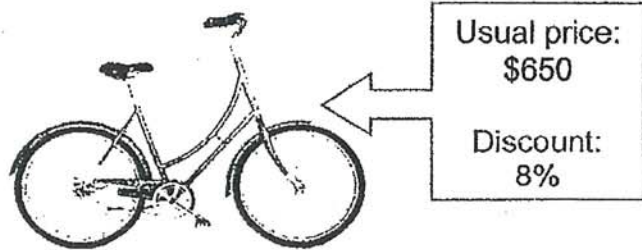
(b) _____



- 23 Express $\frac{4}{7}$ as a decimal correct to the nearest tenth.

Ans: _____

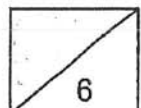
- 24 Chandra bought a bicycle which was sold at a discount during a sale.
How much discount was given for the bicycle?



Ans: \$ _____

- 25 A machine can print 300 greeting cards in 20 minutes. At this rate, how long will it take to print 1800 greeting cards?

Ans: _____ min



- 26 Mrs Cheng has enough money to buy exactly 24 pens at 3 for \$5 or exactly 50 erasers. How much does each eraser cost?

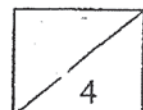
Ans: \$ _____

- 27 The table shows the number of bottles and cans collected by three classes for a recycling event.

Class	Number of bottles	Number of cans
5A	23	17
5B	16	34
5C	45	15
Total	84	66

Which class collected 40% of all the items?

Ans: _____



- 28 The table shows the number of pages of a book Aini read in 4 days.

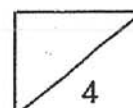
Day	Monday	Tuesday	Wednesday	Thursday
Number of pages	29	0	5	38

What was the average number of pages Aini read each day?

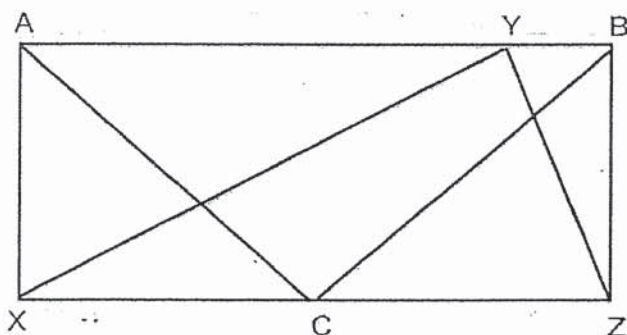
Ans: _____

- 29 Siti had 60 more photocards than Rita at first. After Rita gave 24 of her photocards to Siti, Siti had 3 times as many photocards as Rita. How many photocards did Rita have in the end?

Ans: _____

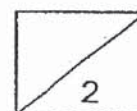


- 30 The diagram below shows triangles inside rectangle ABZX.



Each statement below is either true, false, or not possible to tell from the information given. For each statement, put a tick (✓) in the correct column.

Statement	True	False	Not possible to tell
Triangle ABC has the same area as Triangle XYZ.			
Triangle AXC has the same area as Triangle BCZ.			



End of Paper

--- CHECK YOUR WORK CAREFULLY ---



AI TONG SCHOOL
2020
END-OF-YEAR EXAMINATION
PRIMARY 5
MATHEMATICS
Paper 2

DURATION : 1 h 30 min
DATE : 3 November 2020

INSTRUCTIONS

Do not open the booklet until you are told to do so.
Follow all instructions.
Answer all questions.
You are allowed to use a calculator.

Name : _____ ()

Class : Primary 5 _____

Marks :

Parent's Signature : _____

Date : _____

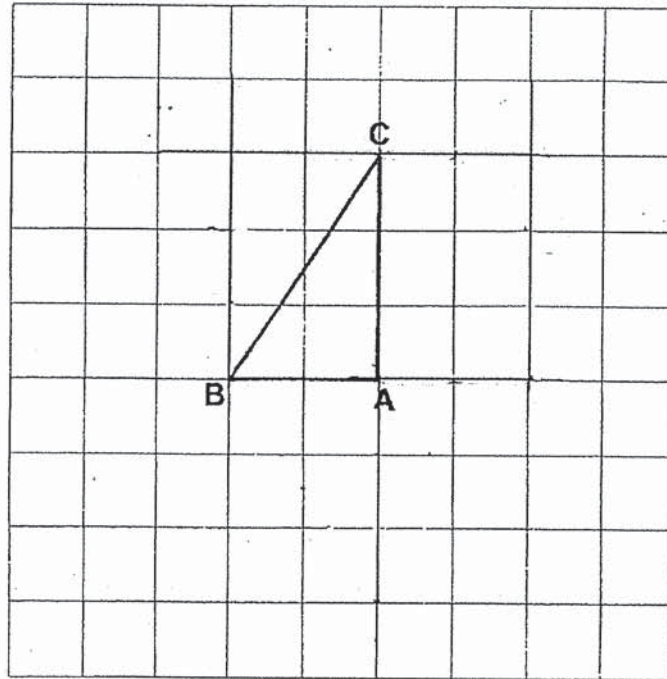
Total

55

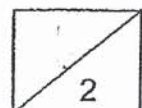
Paper 2

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)

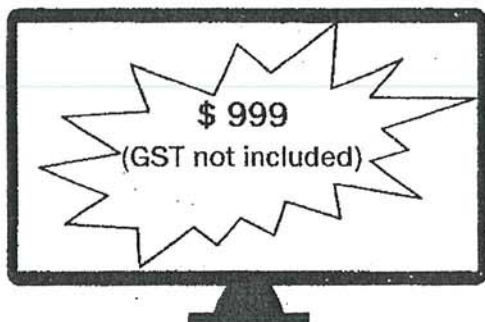
- 1 The figure below shows a right-angled triangle, ABC, drawn on a square grid.



- (a) ABX is a right-angled triangle with the same area as triangle ABC. Draw triangle ABX on the square grid such that ABX does not overlap with triangle ABC. Label point X.
- (b) ACDE is a rectangle that has twice the area of triangle ABC. Draw rectangle ACDE on the square grid such that ACDE does not overlap with triangle ABC. Label points D and E.



- 2 What is the price of the television set after adding 7% GST?

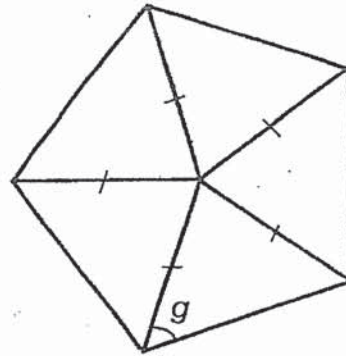


Ans: \$ _____

- 3 1 pie and 1 muffin cost \$5.95.
3 pies and 2 muffins cost \$15.70.
How much does 1 pie cost?

Ans: \$ _____

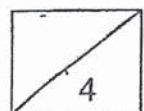
- 4 The figure below is made up of 5 identical isosceles triangles. Find $\angle g$.



Ans: _____ °

- 5 Eileen arranged 180 red and white beads in a circle to make a decoration for National Day celebrations. She arranged 3 red beads between every 2 white beads. How many white beads did she use?

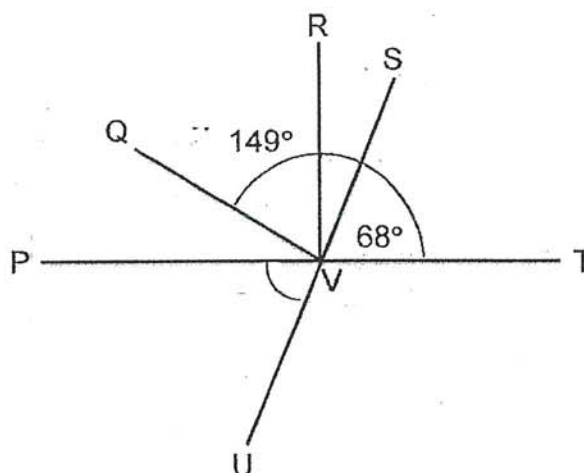
Ans: _____



For questions 6 to 17, show your working clearly in the space provided for each question and write the answers in the spaces provided. The number of marks available is shown in the brackets [] at the end of each question or part-question.

(45 marks)

- 6 In the figure, PVT and SVU are straight lines. $\angle PVR$ is a right angle. $\angle SVT = 68^\circ$ and $\angle QVT = 149^\circ$. Find $\angle QVU$.



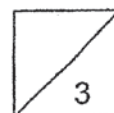
Ans: _____ [3]

- 7 There were 252 more cars than motorcycles in a car park.
 $\frac{1}{4}$ of the number of cars was equal to $\frac{3}{5}$ of the number of motorcycles.
 How many cars and motorcycles were there altogether?

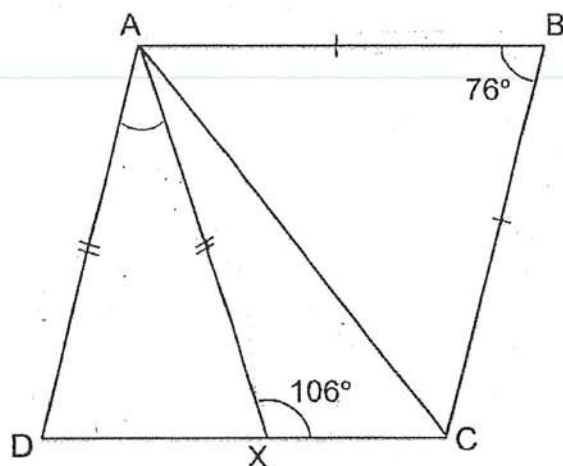
Ans: _____ [3]

- 8 Grandma Ling gave a sum of money to her daughter and three grandchildren in the ratio 4 : 9. Each grandchild received \$627. How much was this sum of money that Grandma Ling gave to the four of them?

Ans: _____ [3]



- 9 In the figure below, ABCD is a quadrilateral. $AB = BC$ and $AD = AX$.
 $\angle ABC = 76^\circ$ and $\angle AXC = 106^\circ$.



- (a) Find $\angle DAX$.

Ans (a) _____ [2]

- (b) **Circle** the word/words that describes/describe ABCD correctly in the following statement:

ABCD (is / is not) a parallelogram.

[1]

- 10 The table shows the fare rates of a taxi service:

Distance travelled	Rate
1 st kilometre or less	\$3.70
Every 400 m thereafter or less	22¢

Mr Richards paid \$9.64 for a taxi ride. What was the greatest possible distance he travelled in the taxi?

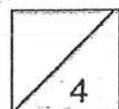
Ans: _____ [3]

- 11 60 men and 50 women enrolled in a course to learn computing skills. The average age of the men was 52 years while the average age of the women was 41 years.

- (a) Find the average age of all the men and women who enrolled in the course.
- (b) When the 10 instructors were included, the average age of everyone at the course became 45 years. What was the average age of the instructors?

Ans: (a) _____ [2]

(b) _____ [2]



- 12 Figure 1 shows a rectangular piece of paper. The bottom left and right corners of the piece of paper were folded to form two identical triangles ABC and EBD as shown in Figure 2. $BC = BD = CD$.

- (a) What is the length of CD ?
- (b) Find the total area of the shaded parts in Figure 2.

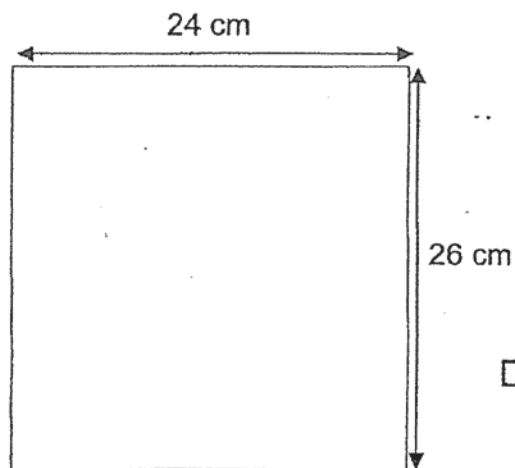


Figure 1

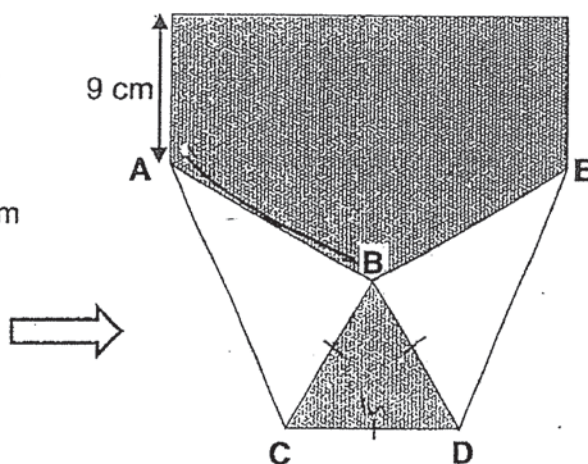


Figure 2

Ans: (a) _____ [1]

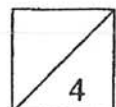
(b) _____ [3]

- 13 A group of students had to fold some origami shapes for a project. They folded 175 shapes on the first day and $\frac{5}{8}$ of the remaining shapes on the second day. After that, they still had $\frac{1}{5}$ of all the shapes to be folded.

- (a) What fraction of all the shapes were folded on the first day?
Give your answer in the simplest form.
- (b) How many shapes did the students have to fold in all?

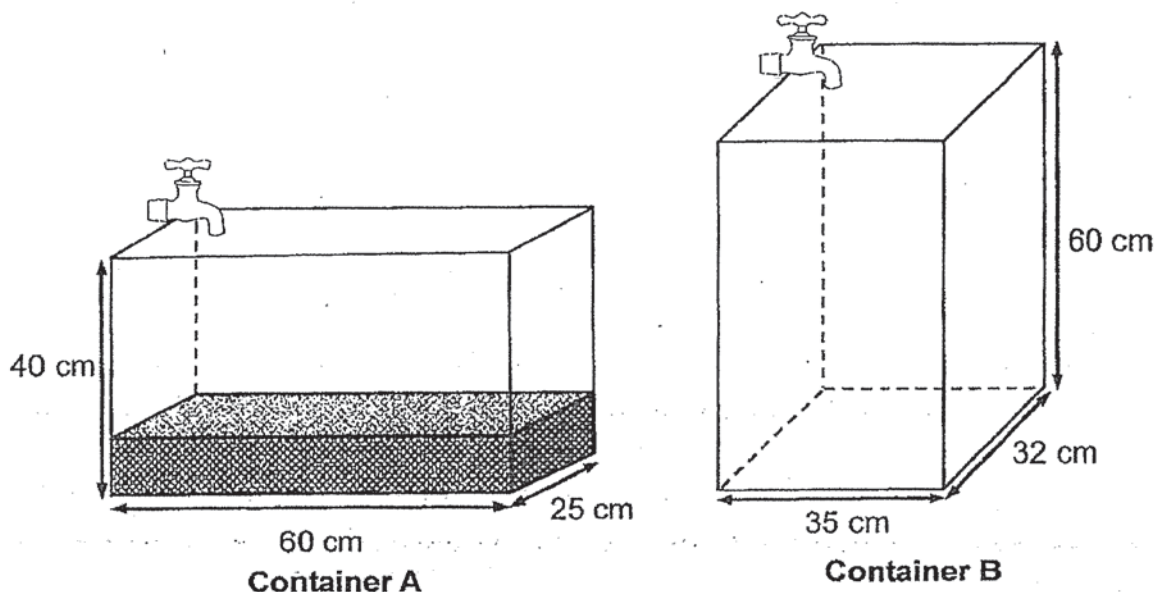
Ans: (a) _____ [1]

(b) _____ [3]



- 14 At first, $\frac{1}{5}$ of container A was filled with water and container B was empty. Then, both taps were turned on at the same time and water from both taps flowed at the same rate of 1.2 litres per minute. Both taps were turned off immediately when container A was filled to the brim.

- (a) How much water was there in Container A at first?
- (b) How long did it take for the water from the tap to fill Container A to the brim?
- (c) What fraction of container B was filled with water in the end?
Give your answer in the simplest form.



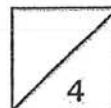
Ans: (a) _____ [1]

(b) _____ [1]

(c) _____ [2]

- 15 There were 331 boys and girls in the canteen. After 91 boys and girls returned to their classrooms, $\frac{4}{5}$ of the boys and $\frac{2}{3}$ of the girls were still in the canteen. How many boys were there in the canteen at first?

Ans: _____ [4]

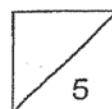


- 16 A container $\frac{3}{4}$ -full of rice had a mass of 5.85 kg. When some rice was scooped out until the container became $\frac{1}{3}$ full, the mass became 3.1 kg.

- (a) How much rice was scooped out? Give your answer in kg and g.
(b) What is the mass of the empty container?

Ans: (a) _____ [2]

(b) _____ [3]

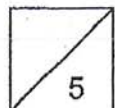


- 17 Some pencils were shared equally among a class of 44 students, with no remainder. 8 students gave all their pencils to the rest of their classmates. As a result, their classmates received 2 more pencils each.

- (a) How many pencils were given away by the 8 students?
- (b) How many pencils were there in all?

Ans: (a) _____ [2]

(b) _____ [3]



ANSWER KEY

YEAR : 2020

LEVEL : PRIMARY 5

SCHOOL : AI TONG SCHOOL

SUBJECT : MATHEMATICS

TERM : SA2

BOOKLET A

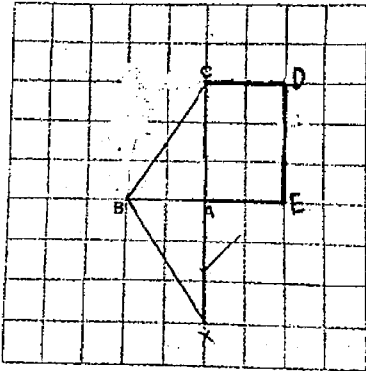
Q1	3	Q2	4	Q3	2	Q4	1	Q5	2
Q6	3	Q7	4	Q8	3	Q9	3	Q10	1
Q11	4	Q12	2	Q13	3	Q14	2	Q15	1

BOOKLET B

Q16	12385
Q17	112
Q18	16.35
Q19	42
Q20	$\frac{11}{20}$
Q21	a) South b) Checkpoint C
Q22	a) Febuary b) May
Q23	0.6

Q24	$\$650 \div 100 = 6.50$ $6.50 \times 8 = \$52$
Q25	120min
Q26	$24 \div 3 = 8$ $8 \times 5 = 40$ $\$40 \div 50 = \0.80
Q27	5C
Q28	$29 + 0 + 5 + 38 = 72$ $72 \div 4 = 18$
Q29	$24 + 60 + 24 = 108$ $108 \div 2 = 54$
Q30	It is true that triangle ABC has the same area as Triangle XYZ. It is not possible to tell whether Triangke AXC has the same area as Triangle BCZ.

BOOKLET C

Q1	
Q2	$999 \div 100 = 9.99$ $9.99 \times 107 = \$1068.93$

Q3	$5.95 \times 2 = 11.90$ $15.70 - 11.90 = \$3.80$
Q4	$360 \div 5 = 72$ $180 - 72 = 108$ $108 \div 2 = 54$
Q5	$180 \div 4 = 45$ $45 \times 1 = 45$
Q6	$90 - 68 = 22$ $190 - 90 - 22 = 68$ $68 + 31 = 99^\circ$
Q7	$12 - 5 = 7$ $252 \div 7 = 36$ $12 + 5 = 17$ $36 \times 17 = 612$
Q8	$627 \times 3 = 1881$ $1881 \div 9 = 209$ $9 + 4 = 13$ $209 \times 13 = \$2717$
Q9	a) $180 - 106 = 74$ $180 - 74 - 74 = 32^\circ$ b) is not
Q10	$9.64 - 3.70 = \$5.94$ $5.94 \div 0.22 = 27$ $27 \times 400 = 10800\text{m}$ $10800\text{m} \approx 10.8\text{km}$ $10.8 + 1 = 11.8\text{km}$

Q11	<p>a) $60 \times 52 = 3120$</p> <p>$50 \times 41 = 2050$</p> <p>$2050 + 3120 = 5170$</p> <p>$60 + 50 = 110$</p> <p>$5170 \div 110 = 47$</p> <p>b) $110 + 10 = 120$</p> <p>$120 \times 45 = 5400$</p> <p>$5400 - 5170 = 230$</p> <p>$230 \div 10 = 23$</p>
Q12	<p>a) $24 \div 3 = 8$</p> <p>b) $24 \times 26 = 624$</p> <p>$\frac{1}{2} \times 8 \times 17 = 68$</p> <p>$624 - (4 \times 68) = 352$</p>
Q13	<p>a) $\frac{7}{15}$</p> <p>b) $175 \div 7 = 25$</p> <p>$25 \times 15 = 375$</p>
Q14	<p>a) $\frac{1}{5} \times (60 \times 25 \times 40) = 12000$</p> <p>b) $\frac{4}{5} \times (60 \times 25 \times 40) = 48000$</p> <p>$48000 \div 1200 = 40$</p> <p>c) $\frac{48000}{67200} = \frac{5}{7}$</p>
Q15	<p>$91 \times 3 = 273$</p> <p>$331 - 273 = 58$</p> <p>$58 \div 2 = 29$</p> <p>$29 \times 5 = 145$</p>
Q16	<p>a) $5.85 - 3.1 = 2.75\text{kg}$</p> <p>$2.75\text{kg} \approx 2\text{kg } 750\text{g}$</p>

	b) $2.75 \div 5 = 0.55$ $3.1 - 2.2 = 0.9\text{kg}$
Q17	a) $44 \cdot 8 = 36$ $36 \times 2 = 72$ b) $72 \div 8 = 9$ $9 \times 44 = 396$

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