

#### SINGAPORE CHINESE GIRLS' SCHOOL FIRST SEMESTRAL ASSESSMENT 2022

#### **PRIMARY 5**

#### **MATHEMATICS**

### PAPER 1 (BOOKLET A)

Total Time for Booklets A and B: 1 h

Nar	ne :	_(	)		31 Oct	ober 2022	
Cla	ss : Primary 5 SY / C / G / SE / P						
Mat	hematics Teachers						
Mrs	El Leen Lau / Mrs Eng Ke Ying / Ms Goh	Ai Ling	/ Mrs	s Kristene C	)ng / Ms Wo	ng See Wan	
INS	STRUCTIONS TO CANDIDATES						
1.	Do not open this booklet until you are	told to	o do s	so.			
2.	Follow all instructions carefully.						
3.	Answer all questions.						

4. Shade your answers in the Optical Answer Sheet (OAS) provided.

5. 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 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. Round off 42 808 to the nearest hundred.
  - (1) 42 000
  - (2) 42 800
  - (3) 42 900
  - (4) 43 000
- 2. What is the value of 20 thousands, 12 hundreds and 5 tens?
  - (1) 320 050
  - (2) 210 205
  - (3) 32 050
  - (4) 21 250
- 3. Express  $3\frac{3}{4}$  as a percentage.
  - (1) 300.34%
  - (2) 300.75%
  - (3) 334%
  - (4) 375%
- 4. There are 40 students in a class. 16 students wear glasses. What is the ratio of students who do not wear glasses to the total number of students?
  - (1) 2:3
  - (2) 2:5
  - (3) 3:5
  - (4) 3:10

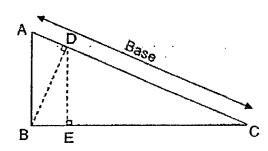
5. Arrange the following from the largest to the smallest.

 $2.5 \qquad \frac{3}{5} \qquad \frac{3}{2}$ 

Largest Smallest

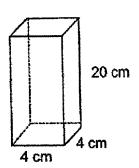
(1) 2.5 ,  $\frac{3}{5}$  ,  $\frac{3}{2}$ (2) 2.5 ,  $\frac{3}{2}$  ,  $\frac{3}{5}$ (3)  $\frac{3}{2}$  , 2.5 ,  $\frac{3}{5}$ (4)  $\frac{3}{5}$  ,  $\frac{3}{2}$  , 2.5

- 6. 200 bags cost \$7040. What is the cost of 1 bag?
  - (1) \$3.52
  - (2) \$7.40
  - (3) \$35.20
  - (4) \$70.40
- 7. Identify the height of Triangle ABC given that the base is AC.
  - (1) AB
  - (2) BC
  - (3) BD
  - (4) DE



### 8. What is the volume of the cuboid?

- (1) 80 cm<sup>3</sup>
- (2) 160 cm<sup>3</sup>
- (3) 320 cm<sup>3</sup>
- (4) 400 cm<sup>3</sup>



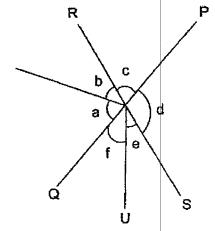
### 9. PQ and RS are straight lines. Which of the following is false?

(1) 
$$\angle c = \angle e + \angle f$$

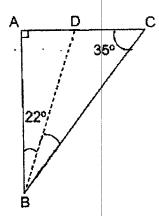
(2) 
$$\angle a + \angle b = \angle d + \angle e$$

(3) 
$$\angle$$
 a +  $\angle$  b +  $\angle$  c = 180°

$$(4) \angle c + \angle d = 180^{\circ}$$



- 10. Figure ABC is a triangle. ∠ABD is 22° and ∠ACB is 35°. Find ∠DBC.
  - (1) 330
  - (2) 55°
  - (3) 57°
  - (4) 68°



11. Peter made 12 bracelets in the morning and 24 bracelets in the afternoon. He sold all the bracelets at 2 for \$12. Which number sentence represents the total amount of money collected by Peter?

- (1)  $12 + 24 \div 12 \times 2$
- (2)  $(12 + 24) \div 2 \times 12$
- (3) 12 + 24 + 2 x 12
- (4)  $(12 + 24) \times 2 + 12$

12. A pattern is formed using the digits 1, 2 and 0. The first 17 digits are shown below. What is the sum of the first 35 digits?

1	2	0	0	1	1	1	2	0	0	1	1	1	2	0	0	1
1 <sup>st</sup>	2 <sup>nd</sup>	3rd		nn dert sit sämerken		<del></del>					····		<del></del>		****	
(1	) 25															
(2	) 29															
(3	) 35															

- 13. A pencil is 5.4 cm long. A pen is 3 times as long as the pencil. What is the total length of the pen and pencil?
  - (1) 15.12 cm

(4) 39

- (2) 16.2 cm
- (3) 20.16 cm
- (4) 21.6 cm

14.	There are 42 cars and motorcycles in a carpark. Which of the following	ng is <u>not</u> a
	possible ratio of the number of cars to the number of motorcycles in	the
	carpark?	

- (1) 6:7
- (2) 5: 2
- (3) 3:4
- (4) 3:11
- 15. A salesman earns \$0.50 for every 7 pens sold. He earns an extra \$1 for every 20 pens sold. How much will he earn if he sold 142 pens?
  - (1) \$7.00
  - (2) \$8.00
  - (3) \$10.00
  - (4) \$17.00

End of Booklet A



#### SINGAPORE CHINESE GIRLS' SCHOOL FIRST SEMESTRAL ASSESSMENT 2022

#### **PRIMARY 5**

#### **MATHEMATICS**

### PAPER 1 (BOOKLET B)

Total Time for Booklets A and B: 1 h

Nε	me :	(	}	31 October 2022
CI	ass : Primary 5 SY / C / G /	SE / P		
Mε	thematics Teachers			
Mr	s El Leen Lau / Mrs Eng Ke Yir	g / Ms Goh Al Ling	/ Mrs Kr	istene Ong / Ms Wong See Wan
IN	STRUCTIONS TO CANDIDA	ATES		
1.	Do not open this booklet un	itil you are told to o	do so.	
2.	Follow all instructions caref	ully.		•
3.	Answer all questions.			! !
4.	You are not allowed to use	a calculator.		!
	•			
		Max Mark		Marks attained
	Booklet B	25		

This booklet consists of 7 printed pages and 2 blank pages.

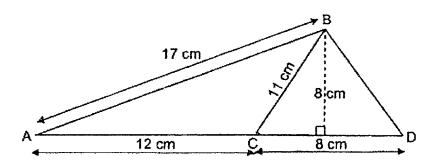
Book	klet B	Do not write in this column
Ques For q	stions 16 to 20 carry 1 mark each. Write your answers in the spaces provided. uestions which require units, give your answers in the units stated. (5 marks)	
16.	Express 1.05 as a mixed number in its simplest form.	
	Ans:	
17.	Use all the digits to form a number closest to 90 000.	
	7 8 9 2 1	
	Ans	
18.	5 boys shared 6 pizzas. What fraction of the pizzas did each boy get?	
	Ans:	3

19. Mr Tan was given 124 sweets. He packed all of them into bags of 8 with some left over. How many sweets were not packed into the bags?

Do not write in this column

Ans: \_\_\_\_\_

20. The diagram below is not drawn to scale. Find the area of triangle ABC.



Ans: \_\_\_\_\_cm

/2

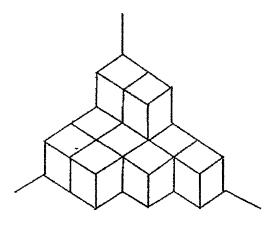
)1a	Convert to grams.		
	3.085 kg =g		
		Ans:9	
21b.	Convert to kilometres.		
	5020 m = km		
		Ans:km	
22.	Find the perimeter of square below. Give in its simplest form.	your answer as a mixed number	
22.		e your answer as a mixed number	
22.	in its simplest form.	e your answer as a mixed number	
22.	in its simplest form.	e your answer as a mixed number	

23. A tin of milk powder weighs 2.5 kg. Mrs Tan bought 10 tins of milk powder and Mrs Farhan bought 20 tins of milk powder. What is the total mass of the tins of milk bought by Mrs Tan and Mrs Fahan?	\$ man and and that
Ans:kg  24. A basket contains red, blue and yellow balls. The ratio of the number of red balls to the total number of balls is 2 : 5. The ratio of the number of blue balls to the number of yellow balls is 1 : 5. What is the ratio of the number of red balls to the number of blue balls?	
Ans:	

	he three sides of a triangle are in the ratio 2 : 3 : 4. The perimeter of t iangle is 135 cm. What is the length of the shortest side of the triangle		Do not write in this column
	Ans:	cm	
26.	60 pupils took part in a Math Olympiad Competition. 24 of them wo gold award. What percentage of the students won the gold award?		
	Ans:	%	

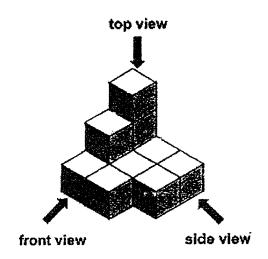
27. What is the least number of unit cubes that must be added to the figure below to form a cube?

Do not write in this column

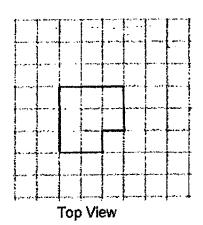


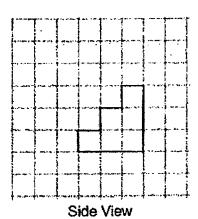
Ans: \_\_\_\_\_

28. Oliver stacked 11 unit cubes to form the solid figure below.



Draw the top view and the side view of the solid on the grids below.

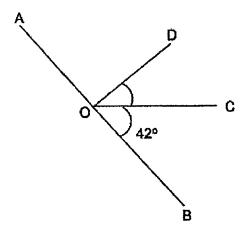




4

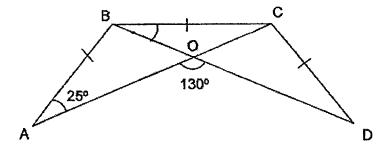
29. In the figure, not drawn to scale, AOB is a straight line. ∠AOD is 2 times of ∠DOC. Find ∠DOC.

Do not write in this column



Ans:	ς
Alio.	

30. In the figure below, ABC and BCD are two identical triangles.Given that AB = BC = CD, find ∠OBC.



	_
Ans:	0

Do not write in this column



#### SINGAPORE CHINESE GIRLS' SCHOOL FIRST SEMESTRAL ASSESSMENT 2022

#### **PRIMARY 5**

#### **MATHEMATICS**

#### PAPER 2

Total Time for Booklets A and B: 1 h 30 min

Name :( )	31 October 2022
Class: Primary 5 SY / C / G / SE / P	
Mathematics Teachers	
Mrs Ei Leen Lau / Mrs Eng Ke Ying / Ms Goh Ai Ling / Mrs Kristene Ong	Ms Wong See Wan
INSTRUCTIONS TO CANDIDATES	

- 5. Do not open this booklet until you are told to do so.
- 6. Follow all instructions carefully. .
- 7. Answer all questions.
- 8. You are allowed to use a calculator.

	-	Max Mark	Marks attained
Paper 1	Booklet A	20	
	Booklet B	25	
Paper 2		55	
Total Marks		100	

Pa	rent's Signature

This booklet consists of 13 printed pages and 2 blank pages.

	What is the missing number in the equation below?	
•		
	+ 18 x 5 + 3 - 2 = 32	
	Ans:	
	5 1	
•	Kelly has a ribbon of length $\frac{5}{6}$ m. She used $\frac{1}{4}$ m to make a bow and $\frac{1}{2}$ of it to wrap a present. How much ribbon was left?	
•	•	
•	•	
•	•	
•	•	
•	•	
•	•	
	•	
	•	
	•	

3.	Mrs Jacobs is now 38 years old. In 4 years' time, she will be 6 times as old as
	her son. How old is her son now?

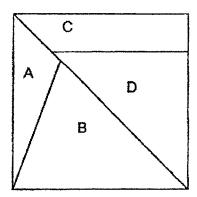
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Ans:	
L119"	

4. The diagram below shows a square. The ratio of area A to area B is 2:5.

The ratio of area C to area B is 3:5.

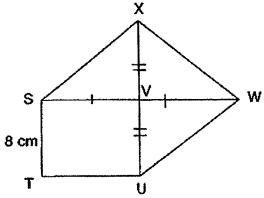
Find the ratio of area A to area D. (Give your answer in the simplest form.)



4

The perimeter of rectangle STUV is 36 cm. XVU and SVW are straight lines.
 Line ST is 8 cm. Find the area of triangle SWX.

Do not write in this column

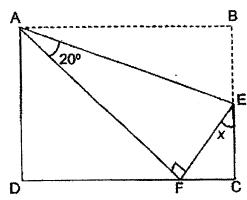


Ans: \_\_\_\_\_ cm<sup>2</sup>

spa	questions 6 to 17, show your working clearly and write your answers in the aces provided. The number of marks available is shown in brackets [ ] at the domain of each question or part-question.  (45 marks)	Ihis column
6.	Mr Ishak paid a total of \$447.60 for 3 tables and 9 chairs. Each chair cost \$15.20 less than a table. Find the cost of a chair.	
	Ans: \$ [3]	
7.	Ronny had some money. He spent $\frac{1}{5}$ of it on a watch and $\frac{3}{8}$ of the	
	remainder on some books. He had \$105 left.	
	How much money did he have at first?	
		Market and printer designs of the control of the co
	Ans: [3]	

8. The figure below shows a rectangle ABCD. It is folded along line AE as shown below. Given that ∠EAF is 20°, find ∠x.

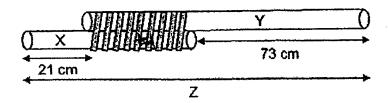
De not write in this column



Ans:	13
,	 į, ~ ,

9. Two rods, X and Y were tied to form a longer rod, Z as shown below. The ratio of the length of Rod X to the length of Rod Y is 3:5.

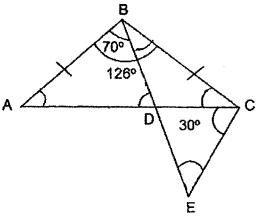
Find the length of Rod Z.



Ans:	[3	

10. In the figure, not drawn to scale, ABC is an isosceles triangle.
BDE is a straight line. ∠ABC is 126°, ∠ABD is 70° and ∠DCE is 30°
(a) Find ∠BCD.

Do not write in this column



Ans: (a) \_\_\_\_\_[1]

(b) Find ∠CED.

Ans: (b) \_\_\_\_\_[2]

11. Anthony has 70 more toy cars than Bala.  $\frac{1}{4}$  of Anthony's toy cars is 25 more than  $\frac{1}{5}$  of Bala's toy cars. How many toy cars do they have altogether?

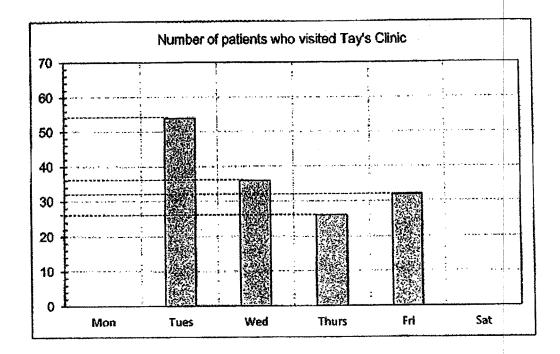
Do not write in this column

Ans: \_\_\_\_\_[4

12.	The usual price of a dress is \$118.75. Mrs Tan was given a 20% discount.  (a) How much is the discount?	Do not write in this column
	Ans: (a)[1]	
	(b) Mrs Tan paid an additional 7% of GST on the discounted price of the dress. How much did she pay for the dress including the GST?	
	(b)[3]	4

13. The graph shows the number of patients visiting Tay's clinic on a certain week. The clinic was closed on Monday.

Do not write in this column



(a) What was the total number of patients from Tuesday to Friday?

Ans:	•	[2]	
M115.		زحا	

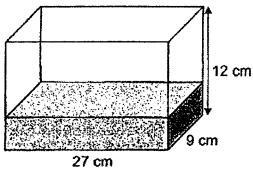
(b) Given that the average number of patients from Monday to Saturday is 34, how many patients were there on Saturday?

-	the state of the s	**	•
Ans:		12	
,		-	•

14. Tank A is 27 cm by 9 cm by 12 cm and it is  $\frac{1}{4}$  - filled with water. All the water from Tank A is poured into container B and it filled container B to the brim.

Do not write in this column

Given that all sides of container B are equal, what is the base area of container B?



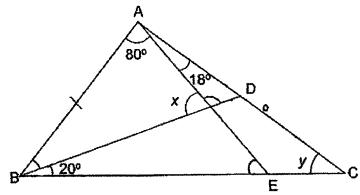
Tank A

Container B

Ans: \_\_\_\_\_[4]

15. In the figure, not drawn to scale, AB = AE and BD and BEC are straight lines.

Do not write in this column



(a) Find  $\angle x$ .

Ans: \_\_\_\_\_[2]

(b) Find  $\angle y$ .

Ans: \_\_\_\_\_[2]

4

	Small cups
2 for \$12	3 for \$15
	Ans: (a)[3]
	nd had \$50 left. She bought as many small remaining money. What fraction of the cups
cups as she could with the r	nd had \$50 left. She bought as many small remaining money. What fraction of the cups

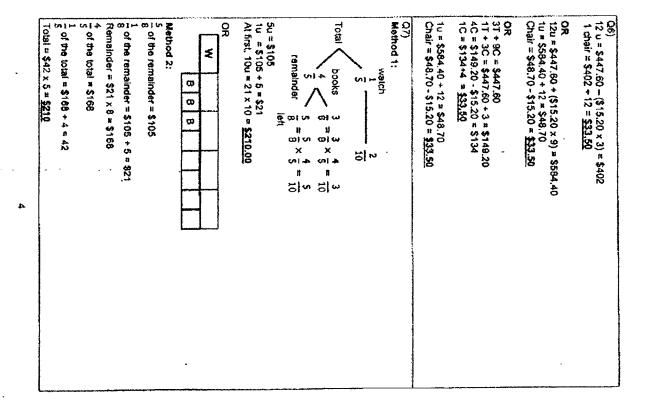
17.	Tory spent $\frac{1}{4}$ of her money on 5 books and 15 sheets of stickers. The cost of each book is 9 times the cost of each sheet of sticker. She bought more books with the remaining amount of money.  (a) How many books did she buy with the remaining amount of money?	Do not write in this cotumn
	Ans (a):[2]	
	(b) Given that Tory spent \$231 more on all the books than all the stickers.  What is the cost of 1 sheet of sticker?	
	Ans (b):[3  End of Paper 2  ~ Please check your work thoroughly. ~	5

Do not write in this column

30 28 28 29 29
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### ### ### ### ### ### ### ### ### ##	SINGAPORE CHINESE GIRLS' SCHOOL PRIMARY 5 NATHENATICS 2022 SEMESTRAL ASSESSMENT 2 Answer Key	4 3 7 3 10 1 13 4 5 2 8 3 11 2 14 1 6 3 9 2 12 2 15 4			2 15 R 4		020	162 OR 41+41+41+41=161	= 2.5×3×10 = 7.5×10 = <u>7.5</u>	(a): B+Y B+Y 1:5: 6	IBI:B+Y B: Y:B + Y		Perimeter, 9u = 135 cm 1u = 135 + 9 = 15 cm Shortest side, 2u = 15 cm x 2 = <u>30 cm</u>
	SINGA		Booket B	89 721 g or 1 t	8 a 15 R	3085	5.02 or 5.020	41 x 4 = 161 OR	2.5 x 30 = 2.5 x 3 x	Total: B	OR R : Tolal: B+Y 2 : 5 : 3	80.4- 80.4-	Perimeter, 9u ≃ 135 1u ≈ 135 ÷ 9 = 15 cm Shortest side, 2u ≃ 1

Area of Triangle SVYX = \frac{1}{2} \times 20 \times 8 = \frac{80 \text{ cm}^2}{2}	Q5) SV = $\frac{36 \cdot (8 \times 2)}{2}$ = 10 cm	2: A 2: A 2: A	2:5 3:5 Area D = 7u = 3u = 4u	Q4) A:B C:B	Q3) Mrs Jacobs (4 yrs time) 38 + 4 = 42 Son then 42 + 6 = 7 Son now 7 - 4 = 3	Wrap present = $\frac{1}{2} \times \frac{5}{6} = \frac{5}{12}$ Total used = $\frac{1}{4} + \frac{5}{12} = \frac{2}{3}$ Ribbon left = $\frac{5}{6} - \frac{2}{3} = \frac{1}{6}$ m	Ribbon left = $\frac{7}{12} - \frac{5}{12} = \frac{1}{6}$ m	making bow = $\frac{5}{6}$	Q2) Method 1	Missing number = 32 - 28 = 4	+28=32		Q1) +18 x 5 +3 - 2 = 32	Mark Scheme
--	---	----------------------	----------------------------------	----------------	---	--	---	----------------------------	-----------------	------------------------------	--------	--	-------------------------	-------------



2 If I add 70 to B, they will have the same number of toy cars 35 (a) Price after discount = 20 x \$ 118.75 = \$23.75 Q138) Total (Tues to Friday) = 54 + 36 + 32 + 26 = 148 Total number of cars = 9u+ 100 = 30 x 9 + 100 = 370 2 (b) Price after discount = \$118,75 - \$23.75 Amount of water in  $A = \frac{1}{4} \times 27 \times 9 \times 12 = 729 \text{ cm}^3$ Dimension of cubical container B = \$7729 = 9 cm Amount payable = \$95 + \$6.65 = \$101.55 OR Q13b) Total for 6 days = 34 x 6 = 204 No of patients on Sat = 204 - 148 = \$6 Amount payable = 107 x \$ 95 = \$101.65 25 OR Amount of water to A = 3 x 27 x 9 = 729 cm<sup>3</sup> Volume of Cubical container B = 729 cm<sup>3</sup> 9 = \$96.00 ₽ GST = 7 x \$ 95 = \$ 6.65 ₽ 35 Base Area = 9 x 9 = 81 cm² ₽ ₹ 4 10 = 100 - 70 = 30 52 A = 4u + 100 B = 5 u ₽ 7 914 Ē ⋖ Č

s g/

> \* \$ Rod Z = 57 cm + 73 cm + 21 cm = 151 cm è ZCED = 180° - 58° - 30° - 27° = 67° Q9) Difference in length, 2u = 73 - 21 = 52 ZCED = 180° - 83° - 30° = 67° ZBDC = 180° - 56° - 27° = 97° 1u=52+2=26 cm Rod Y, 5u=28 x 5=130 Rod X, 3u=26 x 3 = 78 Rod Z=130 cm + 21 cm = <u>151 cm</u> Rod Z = 78 cm + 73 cm = 151 cm ZCDE = 180° - 97° = 83° ZEAF = ZBAE =20° ZBEA = 180° - 90° - 20° = 70° ZBEA = ZAEF = 70° ZDBC = 126° - 70° = 56° (a) ZBCO = 180°-126° = 27° (b) ZDBC = 126° -- 70° = 56° ZX = 180° - 70° - 70° = 40° 9 8

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of money = 5 x 9u + 15 x 1u = 45u + 15u = 60u

of money spent on books = 60u x 3 = 180u
                                                                                                                                                                                                            Since 1 book is 9 u.
No of books (from remaining money) = 180u + 9u = 20 books
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (b)
No of small cups = $50 + $15 = 3 R $5
Total number of cups = 3 x 3 + 6 = 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 <u>6</u> 5
Can buy --- 6 books x 3 = 18 books
6 stickers x 3 = 18 stickers
                                                                                                        With 60u, one can buy -- 6 books + 6 stickers
                                                                                                                                    7 of money = 5 x 9u + 15 x 1u = 45u + 15u = 60u
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Equal number of cups = 6 small and 6 larger
1 set (difference) = 6 large cups - 6 small cups
= $36 - $30
                                                                    Since - of money spent on books,
                                                                                                                                                                                                                                                                                                                                                                             (a) 1 sheet of sticker = 1u
1 book = 8u
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Fraction of cups that are small = \frac{9}{15}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OR Using Guess and Check
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           24 \times 2 = 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OR using the following multiples with correct cost
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Total number of cups = 4 x 12 = 48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 No of sets
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 No of sets = $24+$1 = 24
Total number of cups = 24 x 2 = 48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         i set (difference) # 1 large cup = 1 small cup # 86 - $5 # $1
No of sets # $24+$1 # 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Large Cups
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Cost 9mail Cups
$72 12
$108 18
$144 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               = $24+$6 = 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         #
$6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cost Diff
$80 $12
```

8

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And 18 stickers = 2 books

No of books (from remaining money) = 18 books + 2 books = 20 books

(b)

Total units spent on books = 180u + 45u = 225u

Total units spent on stickers = 15u

Difference = 225u - 15u = 210u

210u = $231

1 sheet of sticker, 1u = $231 + 210 = $1.10
```