P5/P6 Math Parent's Webinar

10TH FEBRUARY 2022

Greendale
PRIMARY SCHOOL

Overview

- School-based support for students' learning
- Polya's 4 Steps Problem Solving
- Format of Mathematics Paper
- Approved Calculators
- Assessment Objectives

School-based Support

- Textbook and Workbook

- L-C-E (Learn-Connect-Excel) booklet
  - reinforce mathematical concepts
  - expose to different model drawings

- Heuristics booklet
  - expose and guide students' learning on the different heuristics/strategies

Polya's 4 Steps Problem Solving

1. Understand

- Identify (Keywords/Topic)
- Interpret (Re-state the Information)
- Infer (Uncover hidden information)

2. Plan

Choose a Strategy

- Model Drawing (Key approach)
- Heuristic (Progressive learning across the levels)

3. Do

- Model / Heuristic
- Equation
- Working
- Answer

4. Check

Is my Solution Reasonable?

Check the following:

- Number
- Transfer
- Units
- Calculation

Format of Mathematics Paper (Standard)

Paper	Booklet	Item Type	Number of questions	Number of marks per question	Total	Duration
1 (Calculators are not allowed)	A	Multiple-choice	10	1	10	1 h
			5	2	10	
	B	Short-answer	5	1	5	
			10	2	20	
2 (Calculators are allowed)		Short-answer	5	2	10	1 h 30 min
		Structured/ Long-answer	12	3, 4 or 5	45	
Total			47	-	100	2 h 30 min

https://www.seab.gov.sg/home/examinations/psle/psle-formats-examined-in-2022

Format of Mathematics Paper (Foundation)

Paper	Booklet	Item Type	Number of questions	Number of marks per question	Total	Duration
1 (Calculators are not allowed)	A	Multiple-choice	10	1	10	1 h
			10	2	20	
	B	Short-answer	10	2	20	
2 (Calculators are allowed)		Short-answer	10	2	20	1 h
		Structured	6	3 or 4	20	
Total			46	-	90	2 h

https://www.seab.gov.sg/home/examinations/psle/psle-formats-examined-in-2022

Approved Scientific Calculators

S/N	Calculator Brand	Calculator Model	Approved Period[1]
1	CASIO	FX 82MS	2003 – 2026
2		FX 85MS	2003 – 2026
3		FX 95MS	2003 – 2026
4		FX 96SG Plus	2013 – 2025
5		FX 97SG X	2018 – 2026
6		FX 350MS	2003 – 2026
7	CANON	F-960SG	2017 – 2026
8	SHARP	EL W531S	2010 – 2023
9		EL W531S II	2018 – 2026
10		EL W531S II Silver Edition	2021 – 2025
11		EL W531XM	2014 – 2023
12		EL 533X	2013 – 2024

https://www.seab.gov.sg/home/examinations/approved-calculators

Assessment Objectives

Cognitive Levels	Standard Math
AO1	recall mathematical facts, concepts, rules and formulae; perform straightforward computations and algebraic procedures
AO2	interpret information; understand and apply mathematical concepts and skills in a variety of contexts
AO3	reason mathematically; analyse information and make inferences; select appropriate strategies to solve problems

https://www.seab.gov.sg/home/examinations/psle/psle-formats-examined-in-2022

AO1 Example 1

P5 Whole Numbers

PSLE 2017
Paper 1: Booklet A
Q8 (1m)

Chandra paid $10 for 20 erasers. How much did each eraser cost?

(1) 5¢

(2) 2¢

(3) 50¢

(4) 20¢

Method 1 (Whole Numbers)

20 erasers → $10

= 1000¢

1 eraser → 1000¢ ÷ 20

= 1000¢ ÷ 10 ÷ 2

= 100¢ ÷ 2

= 50¢

Ans = (3) 50¢

AO1 Example 1

P5 Whole Numbers

PSLE 2017
Paper 1: Booklet A
Q8 (1m)

Chandra paid $10 for 20 erasers. How much did each eraser cost?

(1) 5¢

(2) 2¢

(3) 50¢

(4) 20¢

Method 2 (Decimal)

20 erasers → $10

1 eraser → $10 ÷ 20

= $10 ÷ 10 ÷ 2

= $1 ÷ 2

= $0.50

= 50¢

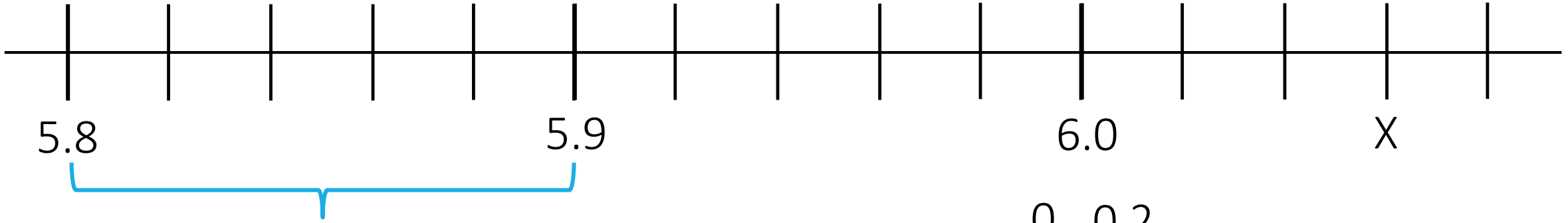
Ans = (3) 50¢

AO1 Example 2

P5 Decimals

PSLE 2016
Paper 1: Booklet A
Q6 (1m)

In the scale below, what is the value of X?



(1) 6.3

(2) 6.6

(3) 6.03

(4) 6.06

Method 1 (Decimal)

5 units = 0.1

1 unit = 0.1 ÷ 5

= 0.02

3 units = 0.02 × 3

= 0.06

6.0 + 0.06 = 6.06

$$
\begin{array}{r}
0.02 \\
5\overline{)\,0.10} \\
0 \\
\hline
1 \\
0 \\
\hline
10 \\
10 \\
\hline
0
\end{array}
$$

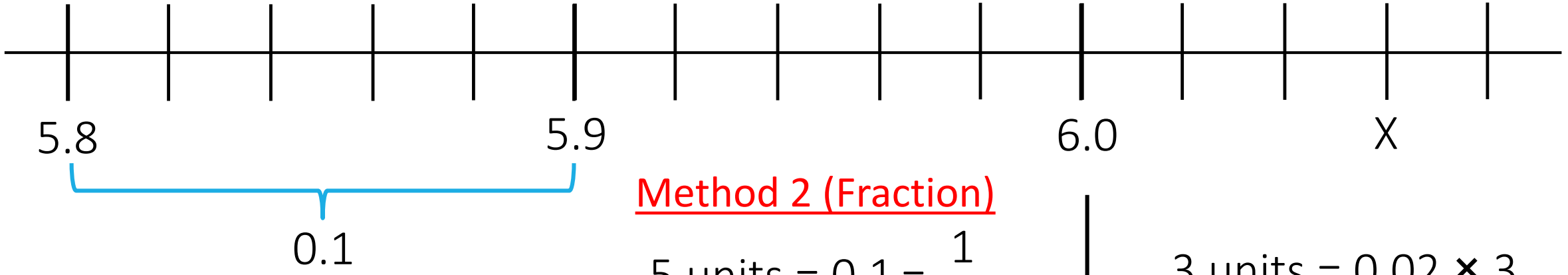
Ans = (4) 6.06

AO1 Example 2

P5 Decimals

PSLE 2016
Paper 1: Booklet A
Q6 (1m)

In the scale below, what is the value of X?



(1) 6.3

(2) 6.6

(3) 6.03

(4) 6.06

Method 2 (Fraction)

$$5 \text{ units} = 0.1 = \frac{1}{10}$$

$$1 \text{ unit} = \frac{1}{10} \times \frac{1}{5}$$

$$= \frac{1}{50} \times 2$$

$$= \frac{2}{100} = 0.02$$

$$3 \text{ units} = 0.02 \times 3$$

$$= 0.06$$

$$6.0 + 0.06 = 6.06$$

Ans = (4) 6.06

AO1 Example 3

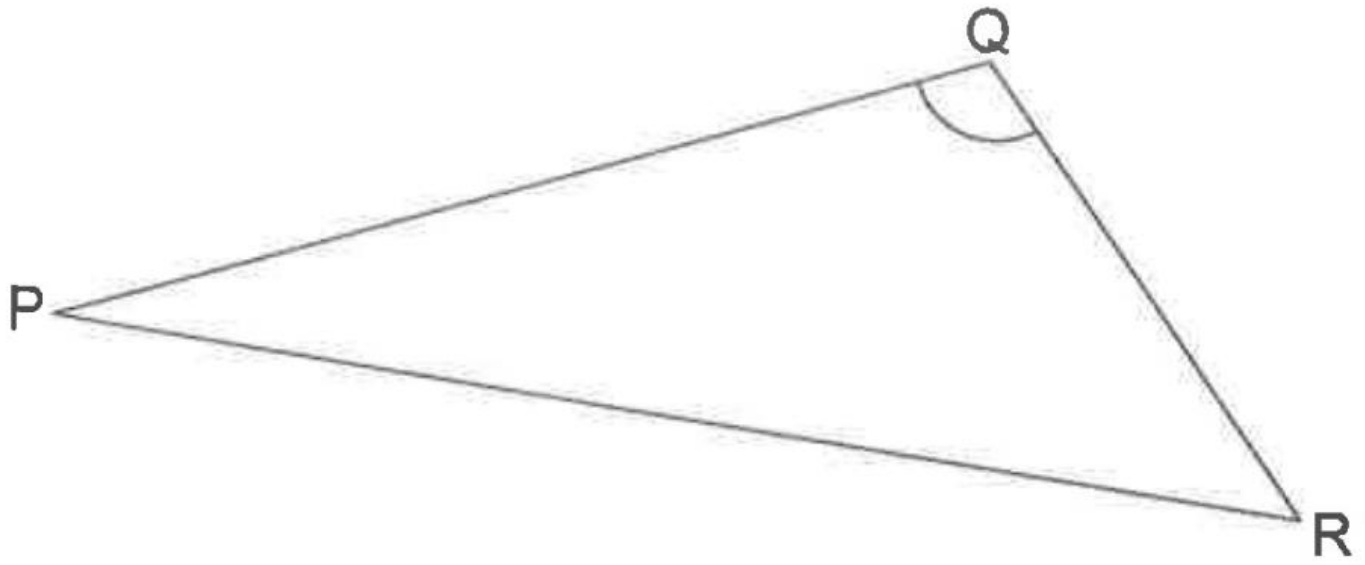
P4 Angles

PSLE 2020
Paper 1: Booklet B
Q24 (2m)

Measure and write down

(a) the length of PR to the nearest 0.1 cm.

(b) the size of $\angle$PQR.



AO1 Example 4

P6 Pie Chart

PSLE 2018
Paper 1: Booklet A
Q7 (1m)

In a class, each pupil chose one animal for their class T-shirt.
The pie chart shows their choices.

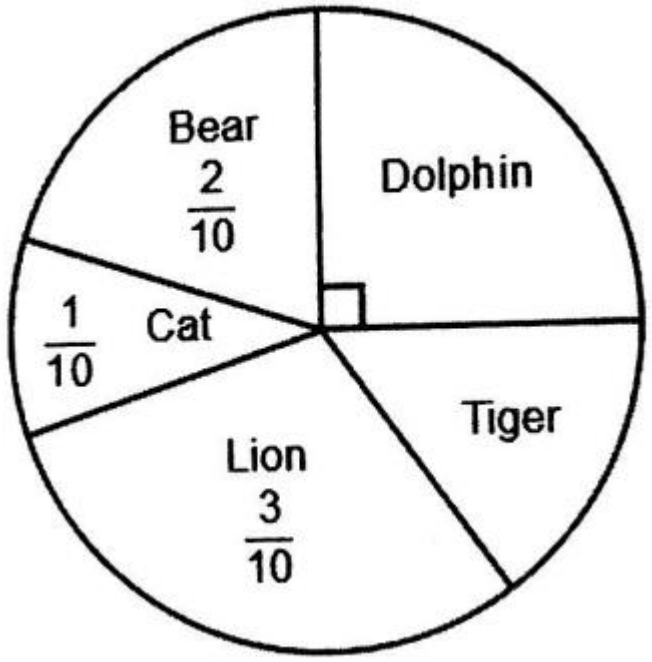
What fraction of the class chose Tiger?

(1) $\frac{1}{5}$

(2) $\frac{1}{8}$

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

(4) $\frac{3}{20}$



$$\frac{2}{10} \times \frac{2}{2} + \frac{1}{10} \times \frac{2}{2} + \frac{3}{10} \times \frac{2}{2} + \frac{1}{4} \times \frac{5}{5}$$

$$= \frac{4}{20} + \frac{2}{20} + \frac{6}{20} + \frac{5}{20}$$

$$= \frac{17}{20}$$

$$1 - \frac{17}{20}$$

$$= \frac{20}{20} - \frac{17}{20}$$

$$= \frac{3}{20}$$

Ans = (4) $\frac{3}{20}$

AO1 Example 5

P2 Length

PSLE 2018
Paper 1: Booklet A
Q3 (1m)

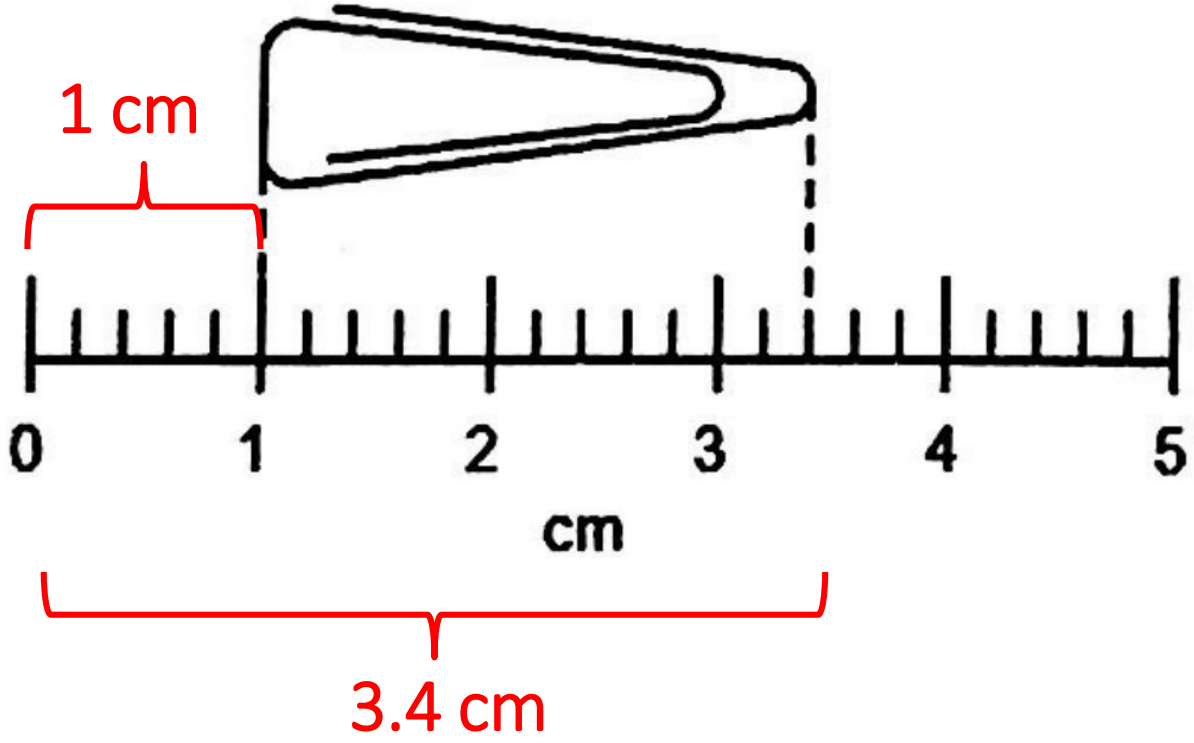
What is the length of the paper clip?

(1) 2.2 cm

(2) 2.4 cm

(3) 3.2 cm

(4) 3.4 cm



3.4 cm – 1 cm = 2.4 cm

Ans = (2) 2.4 cm

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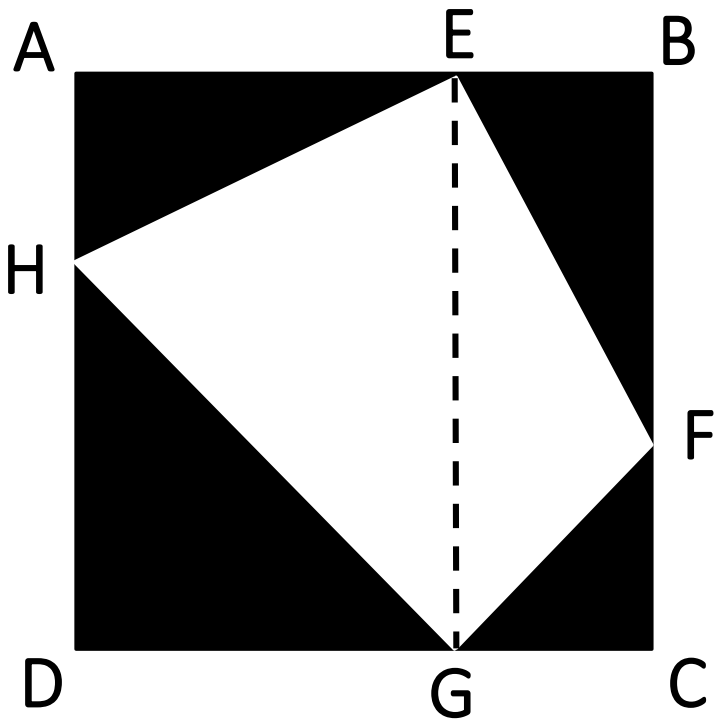
AO2 Example 1

P5 Area of Triangle

PSLE 2019
Paper 1: Booklet B
Q29 (2m)

ABCD is a square of side 12 cm.
It is formed from two rectangles AEGD and EBCG.
H is a point on AD and F is a point on BC.

Find the area of EFGH.



$12\text{ cm} \times 12\text{ cm} = 144\text{ cm}^2$

$144\text{ cm}^2 \div 2 = 72\text{ cm}^2$

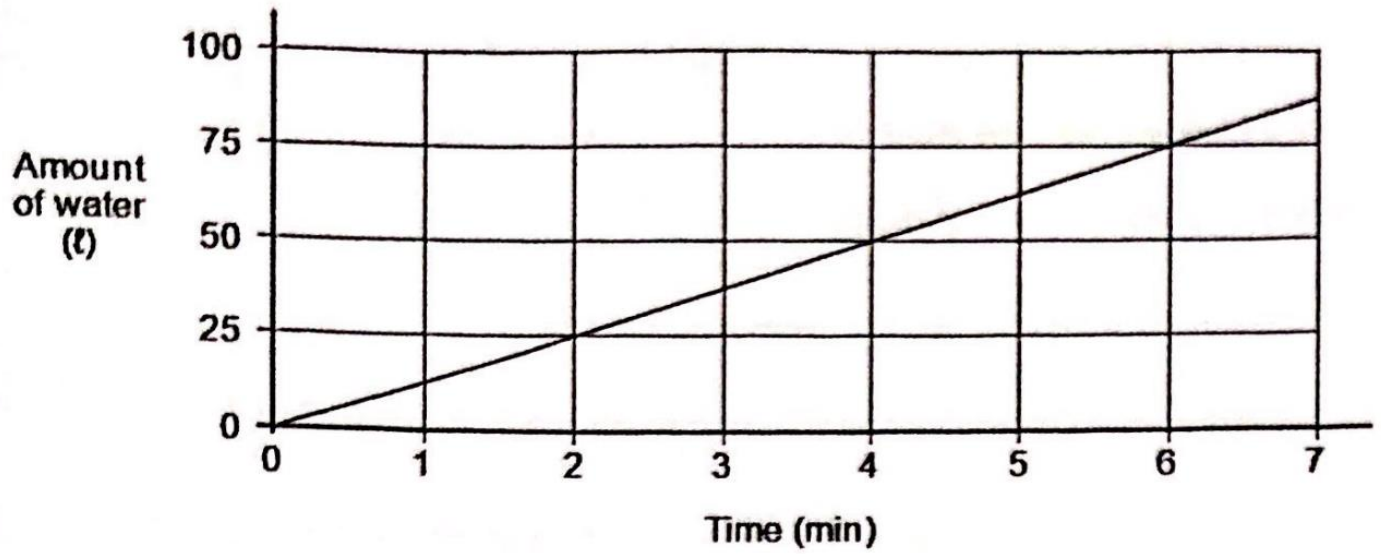
Ans = 72 cm^2

AO2 Example 2

P5 Rate

PSLE 2019
Paper 1: Booklet B
Q26 (2m)

The graph shows the amount of water that flows from a tap.



At this rate, how many litres will flow from tap in 32 minutes?

2 min → 25 ℓ

32 min → 25 ℓ × 16
= 400 ℓ

Ans = 400 ℓ

AO2 Example 3

P5 Pattern

PSLE 2020
Paper 1: Booklet B
Q28(2m)

A roll of tape has stars and hearts printed in a repeated pattern.

Mabel cuts a piece of tape from the roll. In that piece, there are 125 stars.
Find the possible numbers of hearts on that piece of tape.

$125 \div 3 = 41$ R2

$41 \times 2 = 82$

Ans = 82

Assessment Objectives

Cognitive Levels	Standard Math
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AO3 Example 1

P5 Whole number

PSLE 2020
Paper 1: Booklet B
Q27(2m)

The table shows the number of storybooks read by each pupil in a group.
Part of the table is covered by an ink blot.
There were 45 pupils who read at least 2 storybooks.

Number of storybooks	0	1	2	3	4
Number of pupils	7	8	20		

Each of the statements below is either true, false or not possible to tell from the information given.
For each statement, put a tick (✓) to indicate your answer.

Statement	True	False	Not Possible To Tell
7 pupils did not read any storybooks.			
There were 80 pupils in the group.			
The number of pupils who read 3 storybooks was equal to the number of pupils who read 4 storybooks.			

AO3 Example 1

P5 Whole number

PSLE 2020
Paper 1: Booklet B
Q27(2m)

The table shows the number of storybooks read by each pupil in a group.
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For each statement, put a tick (✓) to indicate your answer.

Statement	True	False	Not Possible To Tell
7 pupils did not read any storybooks.	✓		

Solution:

Base on the given table, it is clearly shown that 7 pupils did not read any storybook.

Therefore, the statement is True.

AO3 Example 1

P5 Whole number

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Paper 1: Booklet B
Q27(2m)

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Each of the statements below is either true, false or not possible to tell from the information given.
For each statement, put a tick (✓) to indicate your answer.

Statement	True	False	Not Possible To Tell
There were 80 pupils in the group.		✓	

Solution:

Total number of pupils = 7 + 8 + 45
= 60

Therefore, the statement is False.

AO3 Example 1

P5 Whole number

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Paper 1: Booklet B
Q27(2m)

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45 pupils who read at least 2 books

Number of storybooks	0	1	2	3	4
Number of pupils	7	8	20		

Each of the statements below is either true, false or not possible to tell from the information given.
For each statement, put a tick (✓) to indicate your answer.

Statement	True	False	Not Possible To Tell
The number of pupils who read 3 storybooks was equal to the number of pupils who read 4 storybooks.		✓	

Solution:

Number of pupils who read 3 or 4 books
= 45 – 20 = **25**

Since 25 is an odd number, it cannot be divided by 2.
Therefore, the statement is **False**.

AO3 Example 1

P5 Whole number

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Paper 1: Booklet B
Q27(2m)

The table shows the number of storybooks read by each pupil in a group.
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7 pupils did not read any storybooks.	✓		
There were 80 pupils in the group.		✓	
The number of pupils who read 3 storybooks was equal to the number of pupils who read 4 storybooks.		✓	

AO3 Example 2

P6 Algebra

PSLE 2018 Paper 2 Q3 (2m)

For a recycling project, Ali collected 17 bottles, Bala collected $2m$ bottles and Carl collected $2 + m$ bottles.

Each of the statements below is either true, false or not possible to tell from the information given. For each statement, put a tick (✓) to indicate your answer.

Statement	True	False	Not Possible To Tell
Ali collected the most number of bottles.			
Bala collected more bottles than Carl.			
The 3 boys collected $3m + 19$ bottles altogether.			

AO3 Example 2

P6 Algebra

PSLE 2018 Paper 2 Q3 (2m)

For a recycling project, Ali collected 17 bottles, Bala collected $2m$ bottles and Carl collected $2 + m$ bottles.

Each of the statements below is either true, false or not possible to tell from the information given. For each statement, put a tick (✓) to indicate your answer.

Statement	True	False	Not Possible To Tell
Ali collected the most number of bottles.			✓

If m is any value that is less than 9,
Ali will collect the most number of bottles.
Let the value of m be 8.

Bala → $2 \times 8 = 16$
Carl → $2 + 8 = 10$

If m is any value that is 9 or more than 9,
Ali will not be the one who will collect the most number of bottles.

Let the value of m be 9.
Bala → $2 \times 9 = 18$
Carl → $2 + 9 = 11$

Therefore, the statement is not possible to tell.

AO3 Example 2

P6 Algebra

PSLE 2018 Paper 2 Q3 (2m)

For a recycling project, Ali collected 17 bottles, Bala collected $2m$ bottles and Carl collected $2 + m$ bottles.

Each of the statements below is either true, false or not possible to tell from the information given. For each statement, put a tick (✓) to indicate your answer.

Statement	True	False	Not Possible To Tell
Bala collected more bottles than Carl.			✓

Similarly to the first statement,
let the value of $m = 1$

Bala → $2 \times 1 = 2$
Carl → $2 + 1 = 3$
Carl collected more bottles than Bala.

If the value of $m = 2$, then

Bala → $2 \times 2 = 4$
Carl → $2 + 2 = 4$.
Bala and Carl collected the same number of bottles.

Therefore, the statement is not possible to tell .

AO3 Example 2

P6 Algebra

PSLE 2018 Paper 2 Q3 (2m)

For a recycling project, Ali collected 17 bottles, Bala collected $2m$ bottles and Carl collected $2 + m$ bottles.

Each of the statements below is either true, false or not possible to tell from the information given. For each statement, put a tick (✓) to indicate your answer.

Statement	True	False	Not Possible To Tell
The 3 boys collected $3m + 19$ bottles altogether.	✓		

Ali → 17

Carl → $2 + m$

Bala → $2m$

Total → $17 + 2m + 2 + m$

$= 3m + 19$

Therefore, the statement is true.

AO3 Example 2

P6 Algebra

PSLE 2018 Paper 2 Q3 (2m)

For a recycling project, Ali collected 17 bottles, Bala collected $2m$ bottles and Carl collected $2 + m$ bottles.

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Statement	True	False	Not Possible To Tell
Ali collected the most number of bottles.			✓
Bala collected more bottles than Carl.			✓
The 3 boys collected $3m + 19$ bottles altogether.	✓		

AO3 Example 1

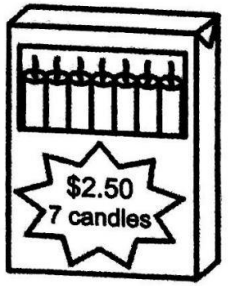
P5 Decimal

PSLE 2018
Paper 2
Q17 (5m)

In a shop, candles are only sold in boxes. A box of 7 short candles costs $2.50 and a box of 5 long candles costs $3.20.

(a) Dan wants 19 short candles and 3 long candles for his lanterns.
What is the least amount of money that Dan will need to spend on the candles? [2]

(b) Eva bought 21 more long candles than short candles from the shop.
The total number of candles she bought was fewer than 50.
How much did Eva spend on the candles altogether? [3]



Box of Short Candles

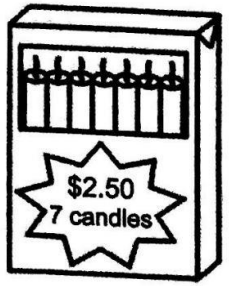
Box of Long Candles

AO3 Example 3

P5 Decimal

PSLE 2018 Paper 2 Q17 (5m)

In a shop, candles are only sold in boxes. A box of 7 short candles costs $2.50 and a box of 5 long candles costs $3.20.



Box of Short Candles

Box of Long Candles

(a) Dan wants 19 short candles and 3 long candles for his lanterns. What is the least amount of money that Dan will need to spend on the candles?

Solution:

Number of boxes of short candles = 19 ÷ 7 = 2 R 5

Number of boxes of short candles needed = 2 + 1

= 3

Number of boxes of long candles needed = 1 box

Amount of money needed to buy the candles = (3 × $2.50) + $3.20

= $7.50 + $3.20

= $10.70

Dan will need to spend at least $10.70 on the candles.

AO3 Example 3

P5 Decimal

PSLE 2018
Paper 2
Q17 (5m)

In a shop, candles are only sold in boxes. A box of 7 short candles costs $2.50 and a box of 5 long candles costs $3.20.

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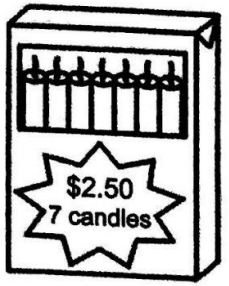
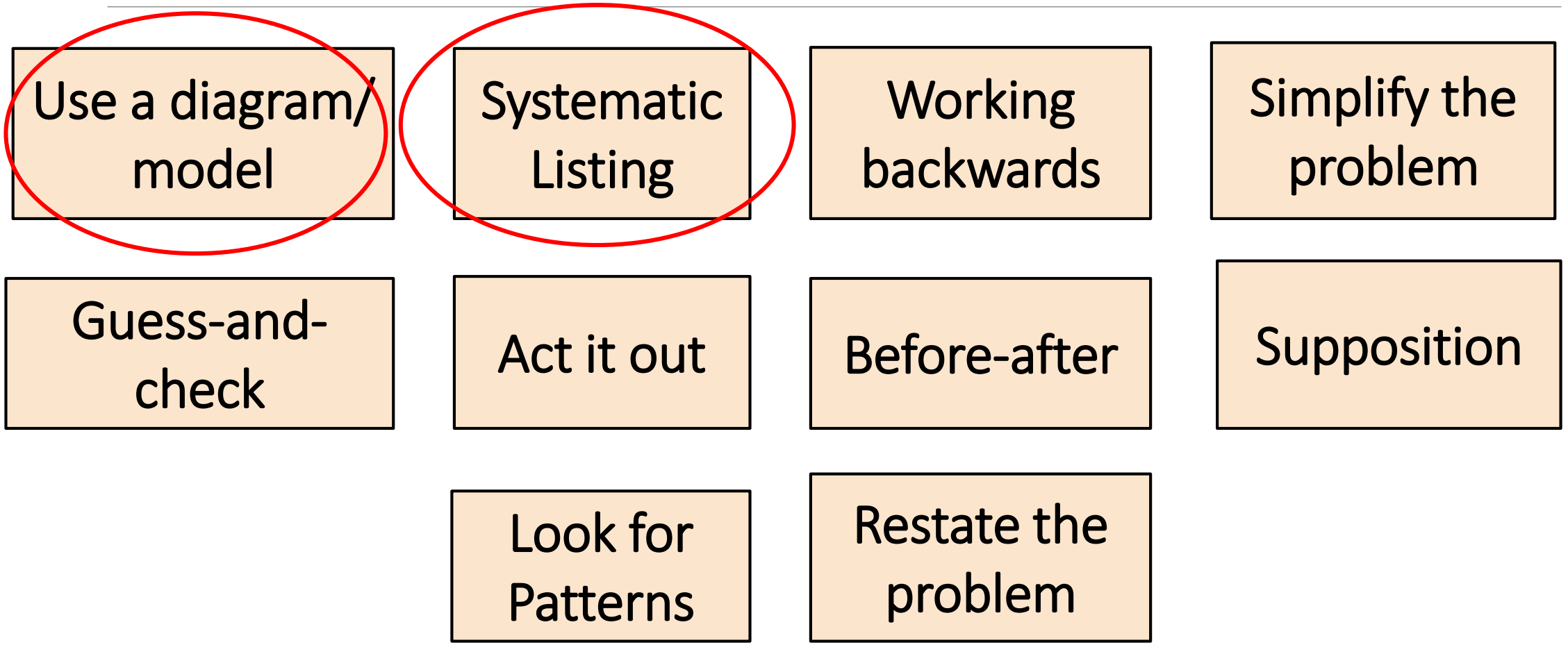


Box of Short Candles

Box of Long Candles

Heuristics-based Questions



AO3 Example 3

P5 Decimal

PSLE 2018 Paper 2 Q17 (5m)

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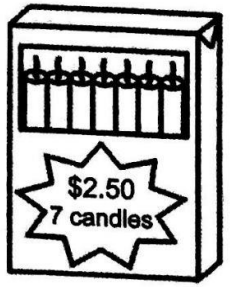


Box of Short Candles

Box of Long Candles

Solution:

Multiples of 5 (Long Candles)	25	30	35	40
Less 21 (Short Candles)	4	9	14	19
Total	29	39	49	59
Check (small box: 7 candles) (Is it divisible by 7?)	×	×	✓	×

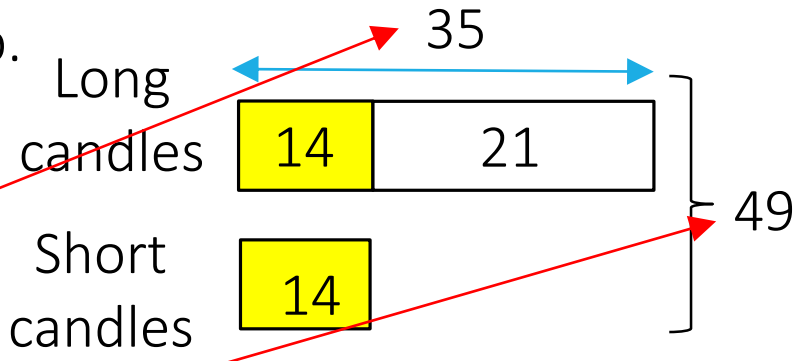
AO3 Example 3

P5 Decimal

PSLE 2018 Paper 2 Q17 (5m)

In a shop, candles are only sold in boxes. A box of 7 short candles costs $2.50 and a box of 5 long candles costs $3.20.

(b) Eva bought 21 more long candles than short candles from the shop. The total number of candles she bought was fewer than 50. How much did Eva spend on the candles altogether? [3]



Multiples of 5 (Long Candles)	25	30	35	40
Less 21 (Short Candles)	4	9	14	19
Total	29	39	49	59
Check (small box: 7 candles) (Is it divisible by 7?)	×	×	✓	×

Cost of long candles = (35 ÷ 5) × $3.20
= $22.40

Cost of short candles = (14 ÷ 7) × $2.50
= $5

Total amount paid for the candles = $22.40 + $5
= $27.40

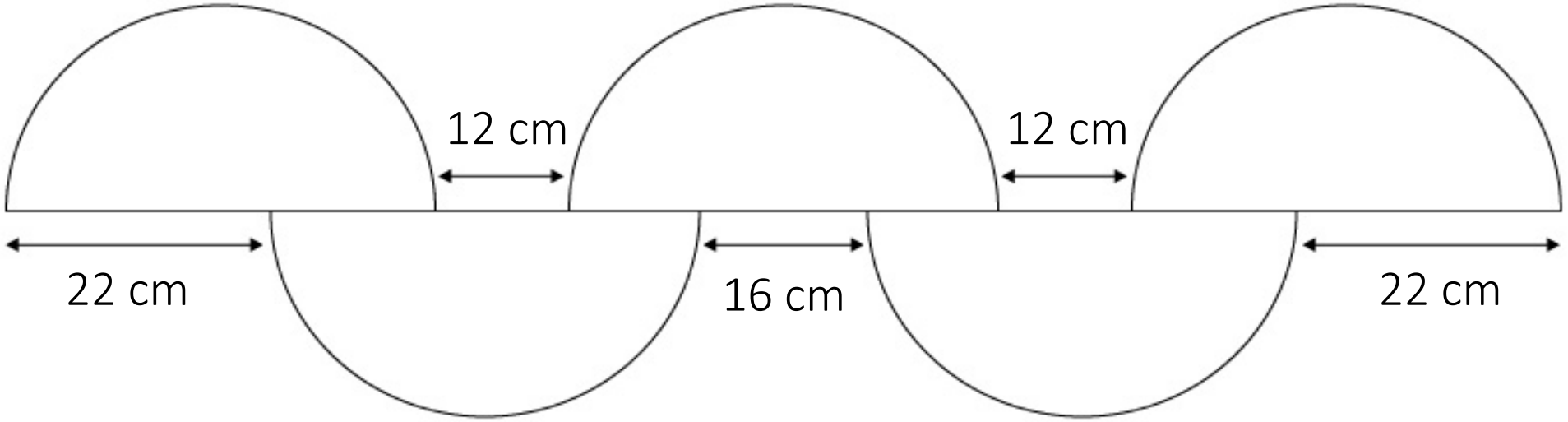
Eva paid $27.40 for the candles.

AO3 Example 4

P6 Area & Circumference of Circle

PSLE 2019
Paper 2
Q16 (5m)

The figure is formed by 5 identical semicircles.



(a) What is the diameter of each semicircle? [2]

(b) Use the calculator value of π to find the perimeter of the figure.
Round your answer to 2 decimal places. [3]

Heuristics-based Questions

Use a diagram/ model

Systematic Listing

Working backwards

Simplify the problem

Guess-and-check

Act it out

Before-after

Supposition

Look for Patterns

Restate the problem

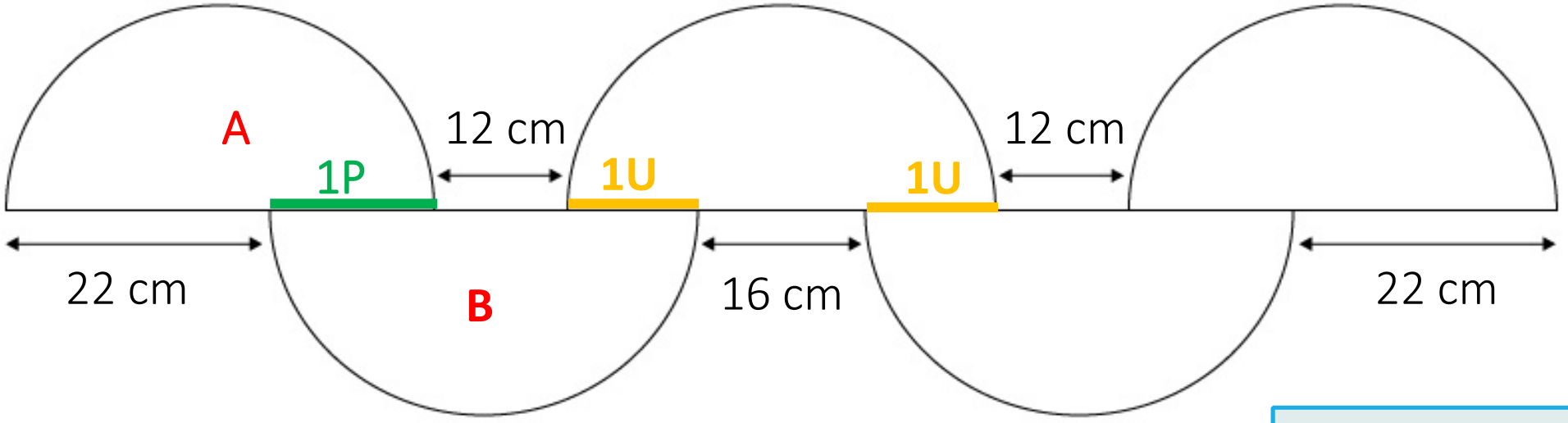
AO3 Example 4

P6 Area & Circumference of Circle

(Method 1)
Use a diagram / model

PSLE 2019
Paper 2
Q16 (5m)

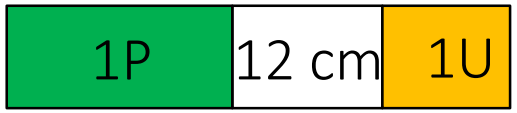
The figure is formed by 5 identical semicircles.



(a) What is the diameter of each semicircle? [2]

A

B



1. Shade the overlapping parts of the semicircles and label them into parts and units.
2. Draw a model to represent each diameter of semicircles A and B.

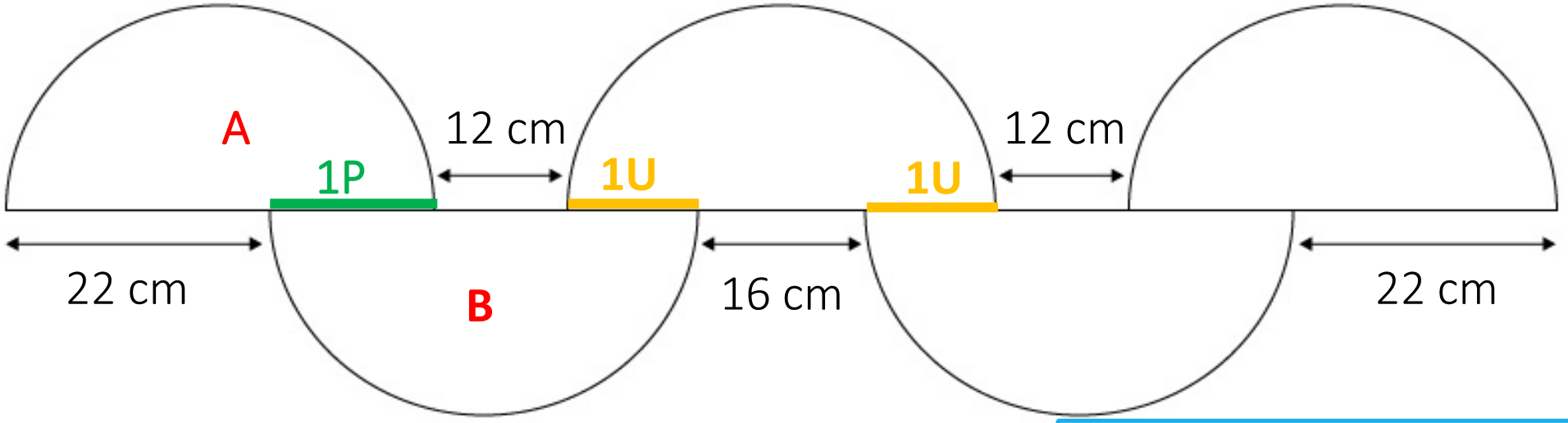
AO3 Example 4

P6 Area & Circumference of Circle

(Method 1)
Use a diagram / model

PSLE 2019
Paper 2
Q16 (5m)

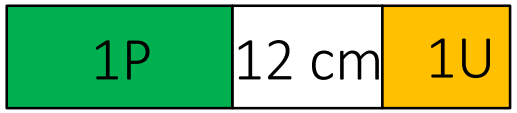
The figure is formed by 5 identical semicircles.



(a) What is the diameter of each semicircle? [2]

A

B



3. Rearrange the parts in model for easier comparison.
4. Calculate.

12 cm + 1U = 22 cm

1U = 22 cm – 12 cm

= 10 cm

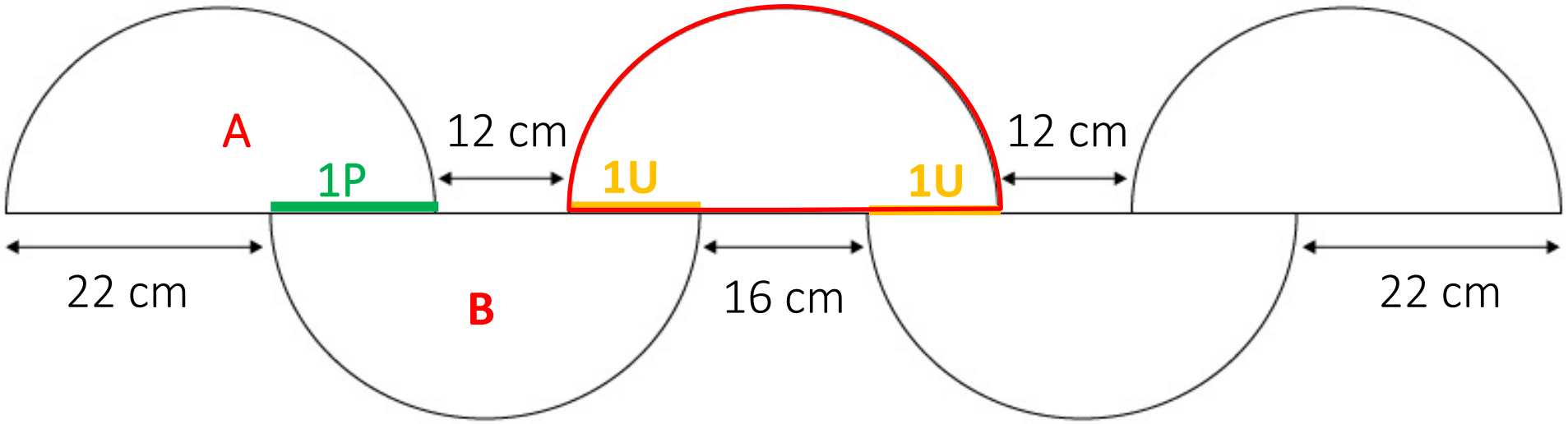
AO3 Example 4

P6 Area & Circumference of Circle

(Method 1)
Use a diagram / model

PSLE 2019
Paper 2
Q16 (5m)

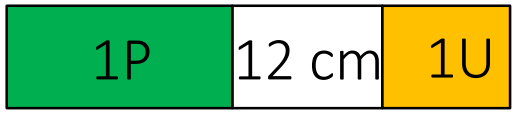
The figure is formed by 5 identical semicircles.



(a) What is the diameter of each semicircle? [2]

A

B



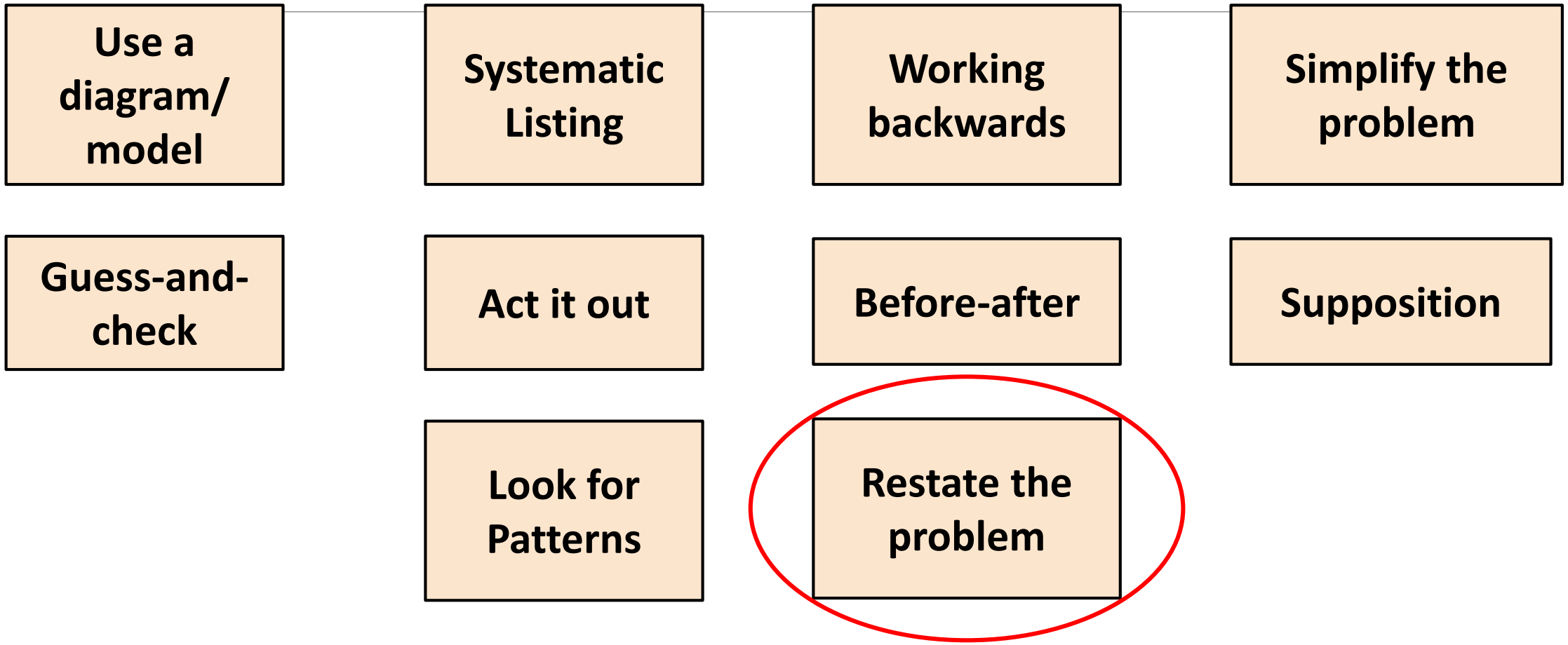
5. Substitute 1U = 10 cm to the following diameter.

Diameter = 1U + 16 cm + 1U

= 10 cm + 16 cm + 10 cm

= 36 cm

Heuristics-based Questions



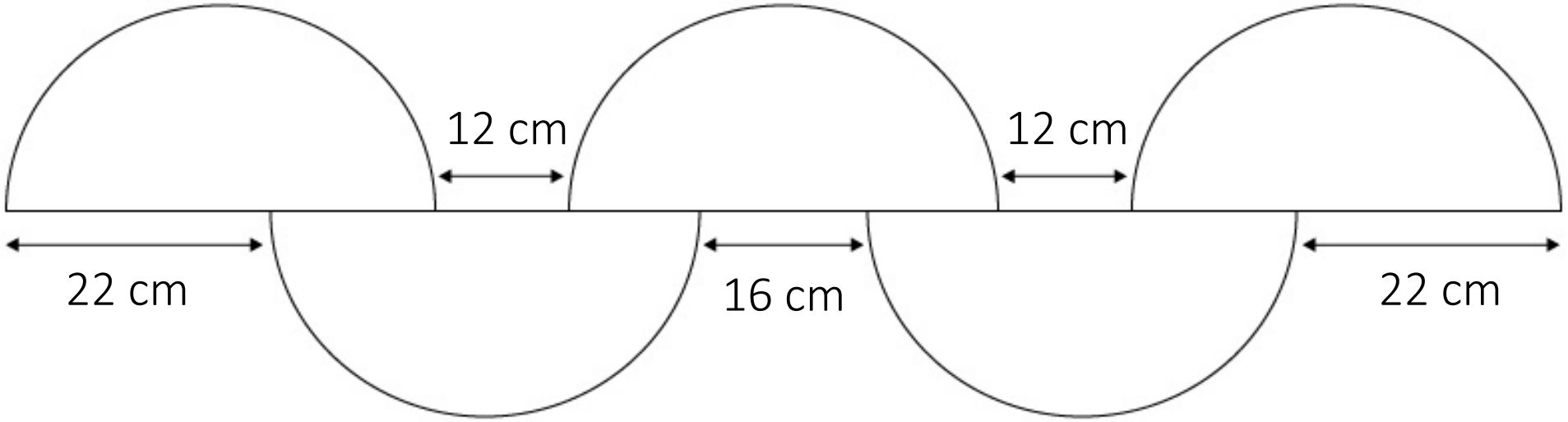
AO3 Example 2

P6 Area & Circumference of Circle

(Method 2)
Restate a Problem

PSLE 2019
Paper 2
Q16 (5m)

The figure is formed by 5 identical semicircles.



(a) What is the diameter of each semicircle? [2]

Rearrange the semicircles and move them all to one side.

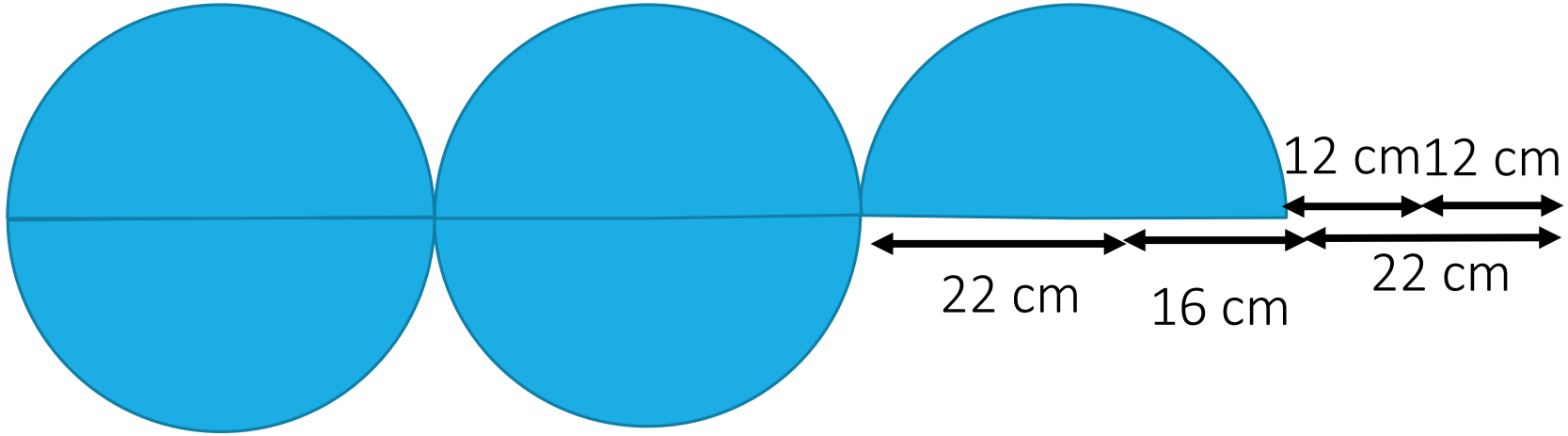
AO3 Example 4

P6 Area & Circumference of Circle

(Method 2)
Restate a Problem

PSLE 2019
Paper 2
Q16 (5m)

The figure is formed by 5 identical semicircles.



(a) What is the diameter of each semicircle? [2]

Rearrange the semicircles and move them all to one side.

Diameter = 22 cm + 16 cm + 22 cm – 12 cm – 12 cm

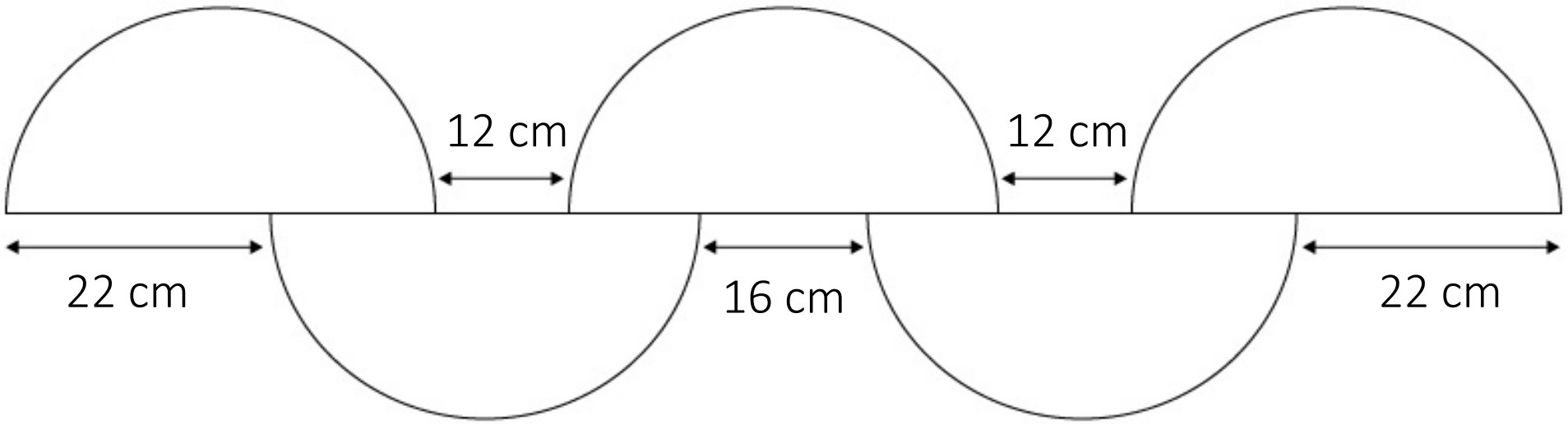
= 36 cm

AO3 Example 4

P6 Area & Circumference of Circle

PSLE 2019
Paper 2
Q16 (5m)

The figure is formed by 5 identical semicircles.



(b) Use the calculator value of π to find the perimeter of the figure.
Round your answer to 2 decimal places. [3]

Arc length of a semicircle $= \frac{1}{2} \times \pi \times D$

$= \frac{1}{2} \times \pi \times 36$

$= 18\pi$

Arc length of 5 semicircles $= 18\pi \times 5$

$= 90\pi$

Perimeter of the figure

$= 90\pi + 22 + 12 + 16 + 12 + 22$

$= 90\pi + 22 + 12 + 16 + 12 + 22$

$= 90\pi + 84$

$= 366.743$

≈ 366.74

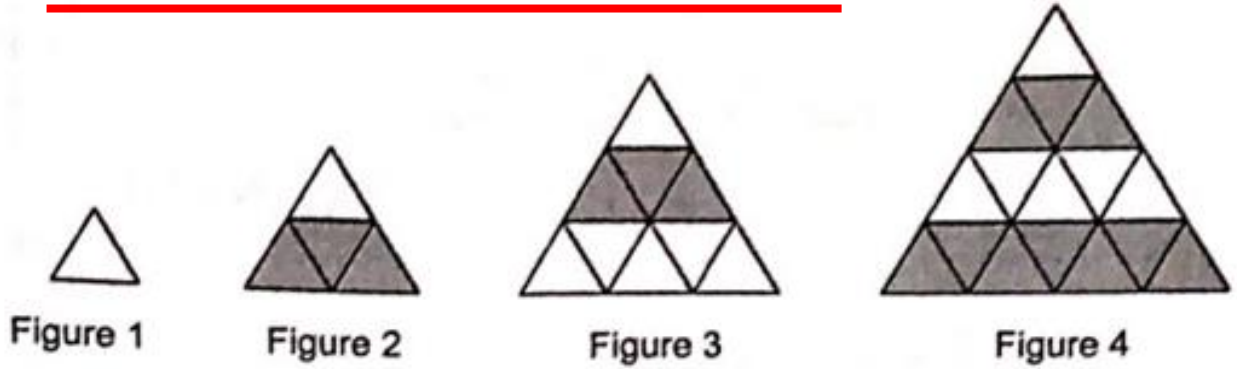
Ans = 366.74 cm

AO3 Example 5

P5 Pattern

PSLE 2019
Paper 2
Q17 (5m)

The first four figures of a pattern are shown below.



The table shows the number of white and grey triangles used for each figure.

Figure Number	1	2	3	4	5
Number of white triangles	1	1	6	6	
Number of grey triangles	0	3	3	10	

a) Fill in the table for Figure 5. [1]

b) What is the total number of white and grey triangles in Figure 250? [1]

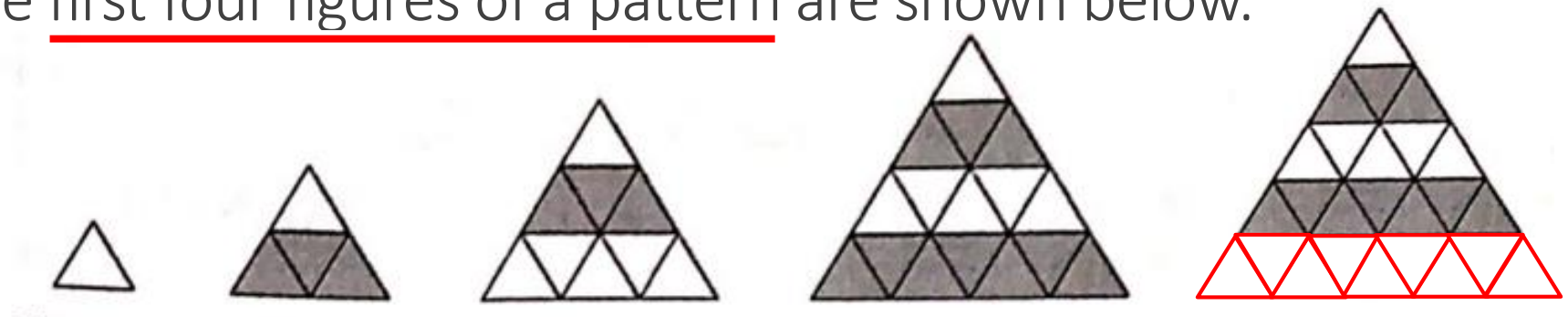
c) In Figure 250, what percentage of the triangles are grey? [3]

AO3 Example 5

P5 Pattern

PSLE 2019
Paper 2
Q17 (5m)

The first four figures of a pattern are shown below.



The table shows the number of white and grey triangles used for each figure.

Figure Number	1	2	3	4	5
Number of white triangles	1	1	6	6	15
Number of grey triangles	0	3	3	10	10

a) Fill in the table for Figure 5.

Draw it out - extra row.

Heuristics-based Questions

Use a diagram/ model

Systematic Listing

Working backwards

Simplify the problem

Guess-and-check

Act it out

Before-after

Supposition

Look for Patterns

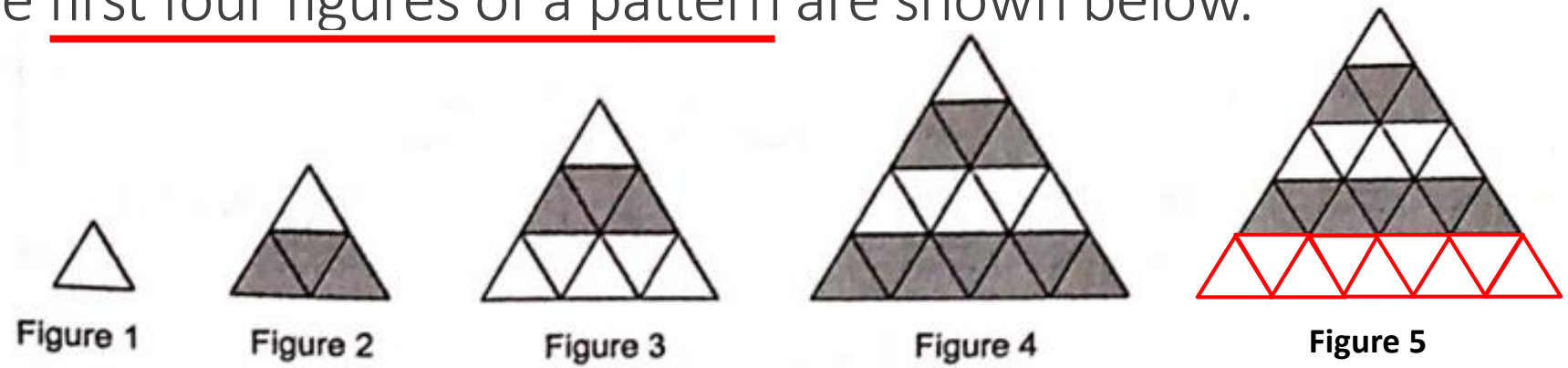
Restate the problem

AO3 Example 5

P5 Pattern

PSLE 2019
Paper 2
Q17 (5m)

The first four figures of a pattern are shown below.



The table shows the number of white and grey triangles used for each figure.

Figure Number	1	2	3	4	5
Number of white triangles	1	1	6	6	**15**
Number of grey triangles	0	3	3	10	**10**

Add a row for 'Total' → 1 × 1 2 × 2 3 × 3 4 × 4 5 × 5

Deduced pattern for 'Total'

Total no of Δ
= Figure no. × Figure no.

Total no. of Δ (Fig. 250)
= 250 × 250
= 62 500

b) What is the total number of white and grey triangles in Figure 250?

AO3 Example 5

P5 Pattern (Method 1)

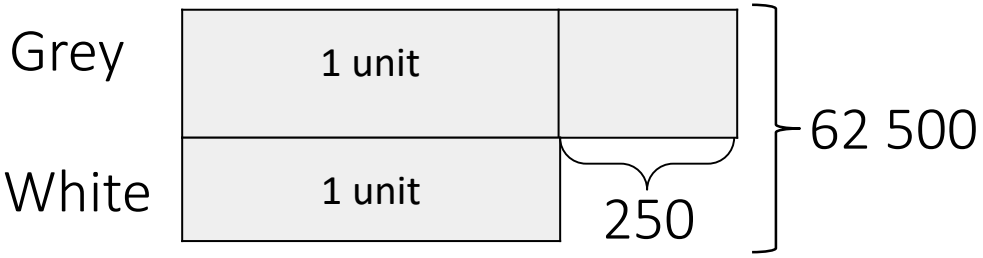
PSLE 2019 Paper 2 Q17 (5m)

The table shows the number of white and grey triangles used for each figure.

Figure Number	1	2	3	4	5	...	250
Number of white triangles	1	1	6	6	15		
Number of grey triangles	0	3	3	10	10		
Total (no. of triangles)	1	4	9	16	25	...	62 500

1 2 3 4 5 250

c) In Figure 250, what **percentage** of the triangles are **grey**?



2 units = 62 500 − 250
= 62 250
1 unit = 62 250 ÷ 2
= 31 125

Grey Δ = 31 125 + 250
= 31 375

$$\% \text{ of grey } \Delta = \frac{31\,375}{62\,500} \times 100\%$$
= **50.2%**

Step 1: Find difference between white and grey triangles
Step 2: Difference in figure 250 is 250
Step 3: Odd figure → more white triangles
Step 4: Even figure → more grey triangles
Step 5: Figure 250 → Even figure - more grey triangles

AO3 Example 5

P5 Pattern (Method 2)

PSLE 2019 Paper 2 Q17 (5m)

The first four figures of a pattern are shown below.

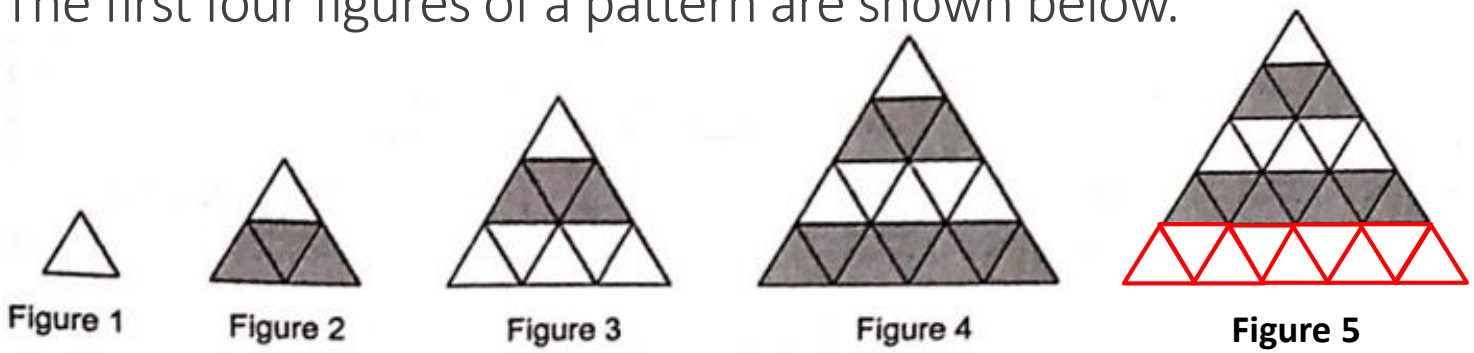


Figure 1 Figure 2 Figure 3 Figure 4 Figure 5

Focus on the **even** figures & no. of grey triangles

The table shows the number of white and grey triangles used for each figure.

Figure Number	1	2	3	4	5	6	7	8	9	10
Number of white triangles	1	1	6	6	15	15	28	28	45	45
Number of grey triangles	0	3	3	10	10	21	21	36	36	55
Total	1	4	9	16	25	36	49	64	81	100

Fig no.	Grey
2	3
4	10
6	21
8	36
10	55
250	?

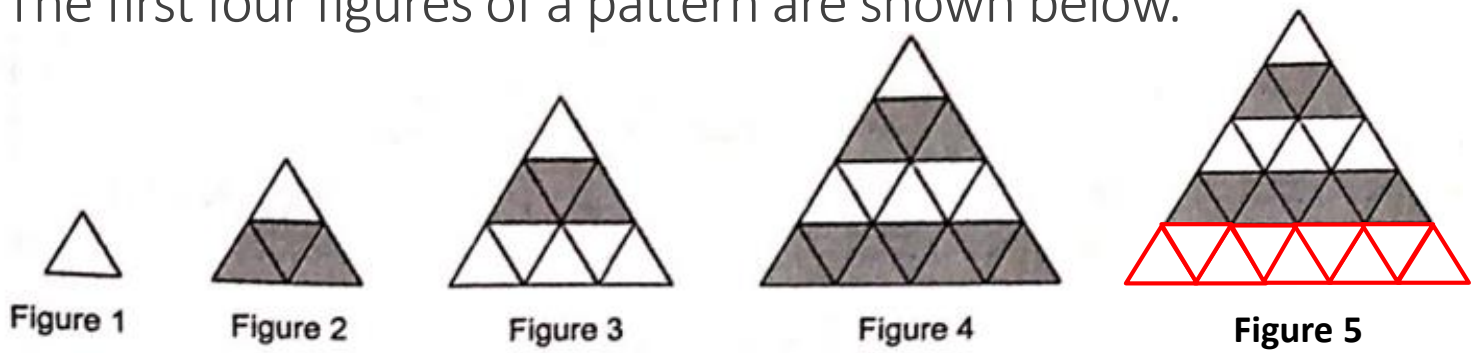
c) In Figure 250, what **percentage** of the triangles are **grey**?

AO3 Example 5

P5 Pattern (Method 2)

PSLE 2019
Paper 2
Q17 (5m)

The first four figures of a pattern are shown below.



Focus on the **even** figures & no. of grey triangles

The table shows the number of white and grey triangles used for each figure.

c) In Figure 250, what **percentage** of the triangles are **grey**?

Fig no.	Pattern	Grey
2 ÷2	1 × 3	3
4 ÷2	2 × 5	10
6 ÷2	3 × 7	21

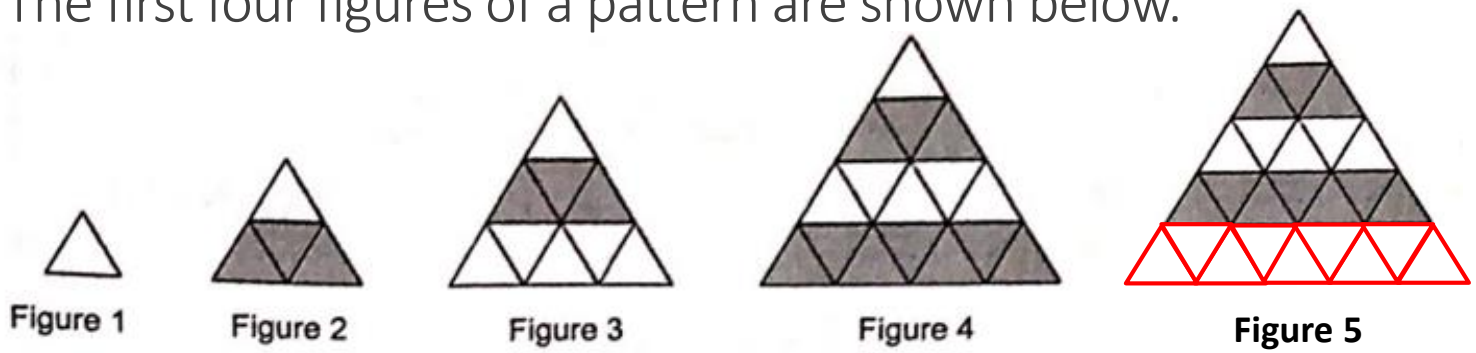
Fig no.	Pattern	Grey
8 ÷2	4 × 9	36
10 ÷2	5 × 11	55
250 ÷2	125 × ?	?

AO3 Example 5

P5 Pattern (Method 2)

PSLE 2019 Paper 2 Q17 (5m)

The first four figures of a pattern are shown below.



Focus on the **even** figures & no. of grey triangles

The table shows the number of white and grey triangles used for each figure.

c) In Figure 250, what **percentage** of the triangles are **grey**?

Fig no.	Pattern	Grey
2	1 × 3	3
4	2 × 5	10
6	3 × 7	21

Fig no.	Pattern	Grey
8	4 × 9	36
10	5 × 11	55
250	125 × 251	31 375

% of grey triangles = $\frac{31\ 375}{62\ 500} \times 100\% =$ **50.2%**