

2023 ANALYSIS

TOP 10 STRATEGIES TESTED IN PSLE

ANALYSIS OF PAST YEAR PAPERS FROM THE PSLE AND SCHOOL EXAMINATIONS

Use this as a guide to prepare yourself better for the PSLE:

- Check if you are able to identify and solve all these 10 question types.
- If you are still not very sure with some of them, check out our strategy worksheets for the notes and practice the questions again.
- Check out Ep 19 of "Understanding PSLE Math Series" for the full rundown of our 2023 analysis of the Top 10 Strategies tested in the PSLE.

MAGICAL RED LINE

ACSJ PRELIM 2022

Mrs Tan had a box of green, blue and red beads. She had 248 green beads. 30% of her beads were blue. She had 24 fewer red beads than blue beads.

(a) What was the total number of beads she had in the box?

(b) Mrs Tan's son bought her some blue beads. Her total number of beads then increased by 25%. How many blue beads did she have in the end?



WHAT REMAINS THE SAME?

ST NICHOLAS GIRLS' SCH SA1 2022

In Box A, the ratio of the number of English books to the number of Chinese books was 2 : 1.

In Box B, the ratio of the number of English books to the number of Chinese books was 3 : 2.

There were 5 times as many books in Box B as in Box A.

(a) What was the ratio of the number of English books in the Box A to the number of English books in Box B? Leave your answer in its simplest form.

(b) When 45 Chinese books were taken out from Box B, the ratio of the number of English books to the number of Chinese books in Box B became 6 : 1. Find the total number of books in Box B at first.



PATTERN OBSERVATION

CATHOLIC HIGH SA1 2021

Shaded and unshaded squares are used to form the figures that follow a pattern. The first four figures are shown below.

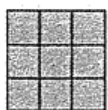


Figure 1

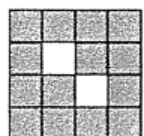


Figure 2

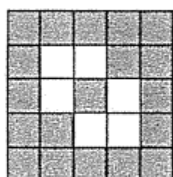


Figure 3

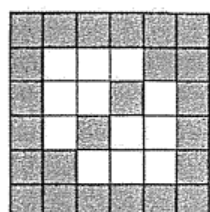


Figure 4

The table below shows the number of shaded and unshaded squares used for each figure.

Figure Number	Number of shaded squares	Number of unshaded squares	Total number of squares
1	9	0	9
2	14	2	16
3	19	6	25
4	24	12	36
5			49

- Complete the table for Figure 5.
- Find the total number of squares in Figure 10.
- Which figure number has 119 shaded squares?

FRACTION OF A RATIO

NAN HUA PRELIM 2022

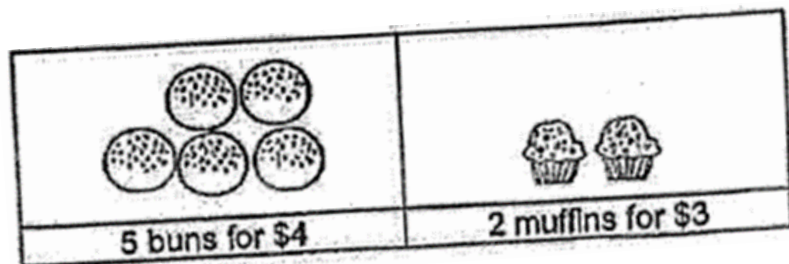
The ratio of the number of apples to the number of pears in a supermarket was $5 : 6$. $\frac{1}{4}$ of the apples and 171 pears were rotten. The rotten apples and pears were thrown away. In the end, there was an equal number of apples and pears left. How many apples were there at first?



COUNTING BY SETS

CATHOLIC HIGH SA1 2022

At a bakery, buns are only sold in packets of 5 and muffins are only sold in packets of 2. The prices are shown below.

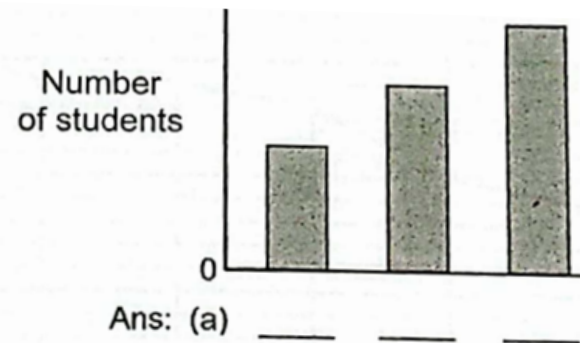


Michael spent the same amount of money on some buns and some muffins. He bought 56 more buns than muffins. How much did he spend on the buns and the muffins in all?

CONNECT GROUP

PSLE 2021

Students played only one sport – basketball, football or handball. $\frac{1}{3}$ of them played football. The number who played handball was $\frac{1}{2}$ of the number who played basketball.



(a) The bar graph represents the number of students who played each sport. Label the bar graph by writing B for basketball, F for football and H for handball in the blanks below.

(b) What fraction of the students played handball?



TAO NAN PRELIM 2022

CONNECT MI

The ratio of the area of Rectangle A to the shaded area of Rectangle A is 7 : 2.

The ratio of the area of Rectangle B to the unshaded area of Rectangle B is 5 : 2.

Find the ratio of the unshaded area of Rectangle A to the area of the whole figure.



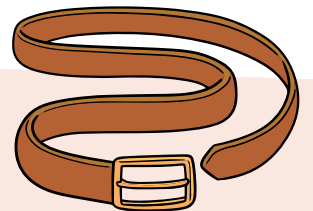
- (1) 1 : 2
- (2) 1 : 7
- (3) 3 : 5
- (4) 3 : 7

SPLIT THE LEG

SCGS SA1 2021



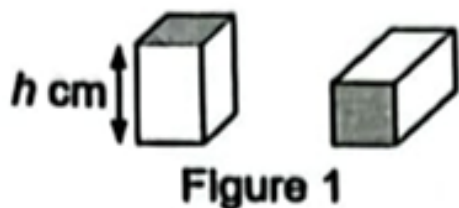
Shen Qi spent $\frac{1}{3}$ of her money on 5 skirts and 14 belts. The cost of each skirt is 4 times the cost of each belt. She bought additional belts as gifts with 25% of the remaining money. How many belts did she buy altogether?



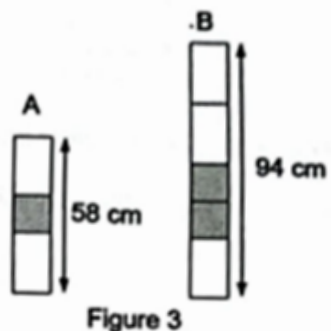
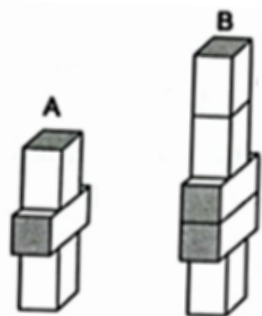
LET'S KILL

PSLE 2022

Lily has identical building blocks. Each block has a square base and a height, h cm as shown in Figure 1.



She uses these blocks to build two towers, A and B, as shown in Figure 2. The height of A is 58 cm, and the height of B is 94 cm as shown in Figure 3.



- What is the height, h of each block?
- What is the volume of each block?

SETS RATIO

ROSYTH SA1 2022

The table below shows the different prices of the tickets for two categories in a sports competition. The ratio of the number of tickets sold for Category A to the number of tickets sold for Category B was 5 : 3. The amount of money collected from the sale of all the tickets was \$19 040. How many children and adults took part in the sports competition altogether?

Category	Cost (\$)
A (1 adult and 1 child)	\$10
B (1 child)	\$6



ANSWER KEY

- (a) 560
(b) 308
- (a) 2 : 9
(b) 150
- (a) 29, 20
(b) 144
(c) 23
- 380
- \$192
- (a) H, F, B
(b) $\frac{2}{9}$
- (3)
- 31
- (a) 22 cm
(b) 4312 cm³
- 3640