2021 PSLE STANDARD MATHS – PAPER 2

PAPER 2 (55 marks)

Questions 1 to 5 carry 2 marks each. Show your working clearly in the space below each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. You may use an approved calculator.
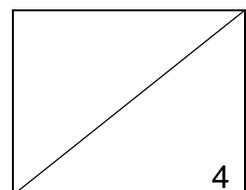
(10 marks)

1. The ratio of the number of yellow buttons to green buttons is 2 : 3. The ratio of the number of yellow buttons to black buttons is 6 : 5. If there are 20 more yellow buttons than black buttons, how many buttons are there in all?

Ans: _____

2. 2 painters can paint an equal amount of 32 walls in 8 hours. How many walls can a painter paint in 30 minutes?

Ans: _____

4

3.   Kitty had some $1 coins and 50 ¢ coins. There were thrice as many 50 ¢ coins as $1 coins. If she had a total of $22.50, how many 50 ¢ coins did she have?
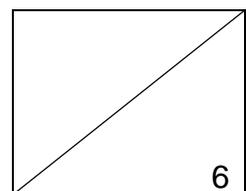
Ans: _____

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4.   Chloe baked a total of 135 tarts in 3 days. Every day, she baked 5 more tarts than the previous day. How many tarts did she bake on the first day?

Ans: _____

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5.   Tommy's age is $\frac{2}{3}$ Ben's age now. In 8 years' time, the ratio of Tommy's age to Ben's age will be 10 : 13. How old is Tommy now?

Ans: _____

6

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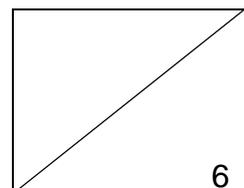
(45 marks)

6.   The mass of Annabelle is 14y kg and the mass of Crystal is 4 kg lighter than Annabelle. What is the average mass of the 2 children? (In terms of y).
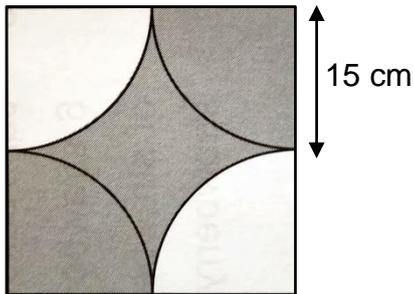
Ans: _____ [3]

7.   Clarke bought a laptop at sale and got a discount of 40% and he paid a total of $990 excluding 7% goods and services tax (GST). What was the original price of the computer including GST?

Ans: _____ [3]

6

8. The figure below shows 4 identical quarters in a square. Find the perimeter of the shaded part. (Take π = 3.14)
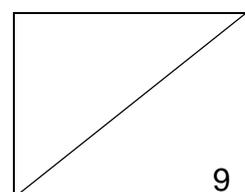

15 cm

Ans: _____ [3]

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9. The average mark in a test for 38 students was 74. Mr Chan discovered that the actual marks of 2 students were recorded incorrectly as 75. After he corrected their marks, the average mark of all his students became 75. What was the actual score of each of the 2 students if the 2 students had the same score?

Ans: _____ [3]

10. There were vans, tricycles and bicycles in a ratio of 12 : 5 : 9. There were 324 wheels altogether. How many vans and bicycles were there?
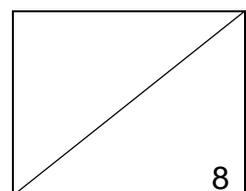
Ans: _____ [3]

9

4

11. A total of 100 volleyballs and soccer balls were in a basket. Jordan put another 12 volleyballs and took 50% of the soccer balls from the basket. The total number of volley balls and soccer balls became 102. Find the percentage increase in the number of volleyballs.

Ans: _____ [4]

12. The number of Kara's dolls was $\frac{5}{7}$ the number of Grace's dolls. After Kara bought 12% more dolls and Grace gave away 30% of her dolls, Kara had 280 more dolls than Grace. How many dolls did Kara have in the end?
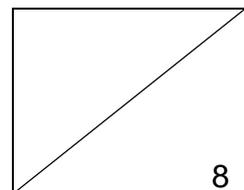
Ans: _____ [4]

8

13. James had a rectangular piece of art paper. He painted $\frac{2}{5}$ of it yellow, $\frac{1}{3}$ of it purple and $\frac{1}{2}$ of the remaining space pink. He had 240 cm^2 of the paper left to be painted. If the length of the whole art paper was twice its breadth, what was its perimeter?
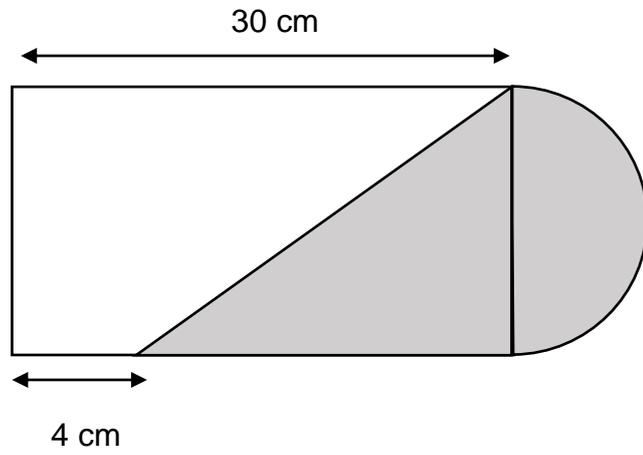
Ans: _____ [4]

14. For each table that Mike sold, he could earn $20. A bonus of $30 would be given to him for every 10 tables sold. How many tables must he sell to earn $3490?
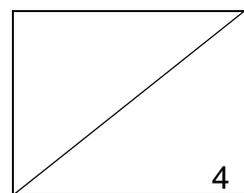
Ans: _____ [4]

8

15. The figure is made up of a semicircle and a rectangle. The breadth of the rectangle is $\frac{1}{3}$ of the length. What is the area of the shaded part? (Take π = 3.14)
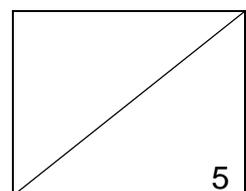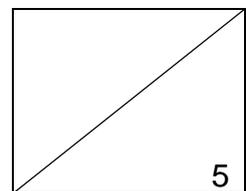

30 cm

4 cm

Ans: _____ [4]

16. Jackson had some red, blue and green t-shirts. For every 5 red t-shirts, there were 6 blue t-shirts. For every 2 blue t-shirts, there were 3 green t-shirts. He gave away 12 red t-shirts and the red t-shirts that he had left were $\frac{1}{10}$ the original number of t-shirts. What was the total number of t-shirts that he had left?

Ans: _____ [5]

5

8

17. Father's Day was coming up. Adam and Joe decided to share the cost of a Father's Day present for their father. The ratio of Adam's share to Joe's share was 4 : 6. When they checked the price of the present again, the cost increased by 20%. As a result, Adam had to pay $57.60 for his share. What was the original cost of the present?

Ans: _____ [5]

End of Paper 2