2021 PSLE STANDARD MATHS – PAPER 1

PAPER 1
(45 marks)

Booklet A (20 marks)

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. Write your answer (1, 2, 3 or 4) in the brackets provided. All diagrams in this paper are not drawn to scale unless stated otherwise. The use of calculators is <u>NOT</u> allowed.

1. Which of the following has the smallest value?

    (1)   0.591
    (2)   0.519
    (3)   0.711
    (4)   0.707

                                                                                ( )

2. Find the value of 150 ÷ (3 + 12) x 5.

    (1)   2.5
    (2)   15
    (3)   50
    (4)   110

                                                                                ( )

3. Which of the following pairs of numbers has a common multiple of 10?

    (1)   2 and 5
    (2)   2 and 7
    (3)   3 and 8
    (4)   4 and 9

                                                                                ( )

4. 4 : 8 = 32 :

What is the missing number in the box?

(1) 38
(2) 44
(3) 56
(4) 64

(   )

5. Peter bought 8 stools at n each during a flash sale. He paid $300 for all the items. How much change did he get back?

(1) $\left(\dfrac{300}{8n}\right)$

(2) $300 - 8n$

(3) $\left(300 - \dfrac{8}{n}\right)$

(4) $(8n)$

(   )

6. Mr Lim's salary, when rounded off to the nearest hundred dollar, is $7000. Which of the following amount is his possible salary?

(1)   6930
(2)   7110
(3)   7075
(4)   7040

(   )

7. Find the value of $\dfrac{10+q}{5} + q$ when q = 5.

(1)   5
(2)   8
(3)   15
(4)   25

(   )

2

8. The ratio of the number of crayons to the number of markers is 4 : 3. The number of pencils is $\frac{3}{5}$ the number of crayons. What is the ratio of the number of pencils to the number of markers?

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

( )

9. Express 2.7 as a percentage.

(1) 0.027 %
(2) 0.27 %
(3) 27 %
(4) 270 %

( )

10. Which of the following is most likely to be mass of a packet drink?

(1) 200 g
(2) 200 kg
(3) 20 g
(4) 20 kg

( )

11. The average height of 5 rods is 18 m. The average height of 3 of the rods is 8 m. Find the average height of the other 2 rods?

(1) 8 m
(2) 18 m
(3) 23 m
(4) 33 m

( )

12. Martin baked 159 pies in June and 122 pies in July. What is the percentage decrease in the number of pies sold between June and July? Round off your answer to the nearest whole number.

   (1)   23%
   (2)   37%
   (3)   40%
   (4)   45%

   (   )

13. Ben and Peter had 84 stickers. Ben had 24 more stickers than Peter. Express the number of stickers Peter had as a fraction of the number of stickers Ben had.

   (1) $\dfrac{3}{5}$

   (2) $\dfrac{2}{3}$

   (3) $\dfrac{4}{5}$

   (4) $\dfrac{5}{9}$

   (   )

14. Ethan and Jill have a total of $47. Ethan and Robert have a total of $112. The ratio of Jill's amount of money to Robert's amount of money is 1 : 6. How much does Ethan have?

    (1) $15
    (2) $20
    (3) $34
    (4) $65

    (   )

15. A bag of 4 oranges cost $3.00. Olivia was given 1 free orange for every bag of oranges bought. What is the maximum number of oranges she could get if she had $12?

    (1) 16
    (2) 18
    (3) 20
    (4) 24

    (   )

Booklet B: (25 marks)

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. The use of calculators is NOT allowed.

(5 marks)

16. Round off the sum of 48 tens and 265 hundredths to the nearest whole number.

    Ans: _____

17. List the common factors of 16 and 36.

    Ans: _____

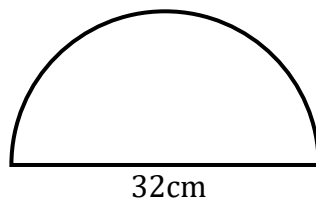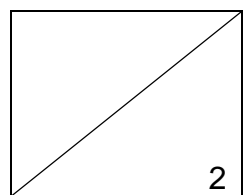18. Find the value of $2\frac{2}{3} - \frac{4}{5}$.
    (Leave your answer in the simplest form).

    Ans: _____
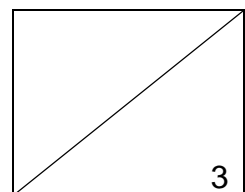
19. Express $\frac{1}{8}$ as a decimal.

Ans: _____

20. Look at the figure below.

Find the area of the semi-circle in terms of π.

32cm

Ans: _____cm^2

2

Questions 21 to 30 carry 2 marks each. Show your working clearly and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. The use of calculators is <u>NOT</u> allowed.

(20 marks)

21. $\frac{2}{5}$ of Nigel's chocolates are equal to $\frac{3}{4}$ of Helen's chocolates. If the difference of the number of chocolates they have is 28, find the number of chocolates Nigel has.
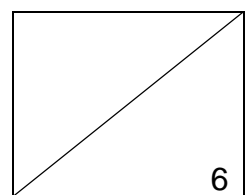
Ans: _____

22. At furniture store, 2 cupboards are sold for $y and a sofa is sold for $150 more than a cupboard. Find the cost of the sofa in terms of y.

Ans: _____

23. The figure below shows a square with a diagonal of 16 cm. Find the area of the square.

16 cm

Ans: _____cm^2

6
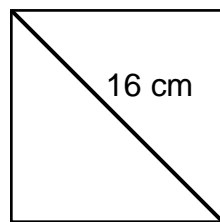
24. In a food court, $\frac{3}{5}$ of the diners were adults and the rest were seniors. $\frac{5}{8}$ of the seniors were males and the rest were females. What fraction of the diners in the food court were females?

Ans: _____

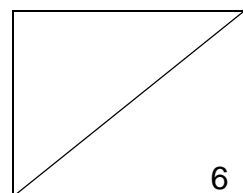25. The table below shows the opening hours of Yummy Restaurant from Monday to Friday every week.

Opening Hours
Lunch: 11.30 am to 2.30 pm
Dinner: 6 pm to 10 pm

How many hours does the restaurant open each week?

Ans: _____h

26. Claire is 7 kg heavier than Beatrice but 4 kg lighter than Lily. Lily is 30 kg. Find the average mass of the 3 girls.
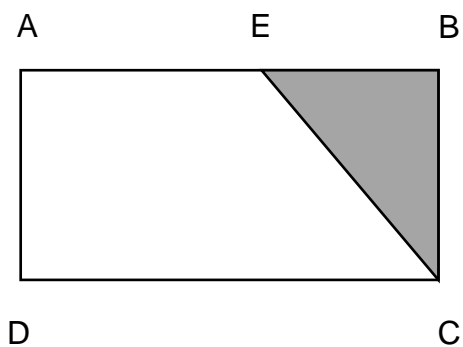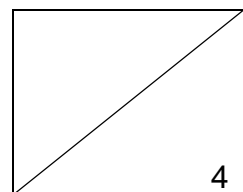
Ans: _____kg

6

27. A container filled with blue marbles completely has a mass of 1.425 kg. It has a mass of 1.161 kg when it is $\frac{4}{7}$ filled with blue marbles. What is the mass of the empty container?

Ans: _____kg

28. In the figure below, ABCD is a rectangle and the length EB is $\frac{3}{4}$ that of length BC. If BC = 20 cm, find the area of the shaded part.

Ans: _____ cm²

29. 12 workers were hired to build the same number of walls each. 3 workers did not turn up and the remaining workers had to build 4 more walls each. What is the total number of walls needed to be built?

Ans: _____ cm²

30. Every month, Wendy spent $1400 of her salary and saved the rest in the bank. In January, her spending decreased by 10% and she managed to save $650. What was her monthly salary?

Ans: $_____

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