

2022 PSLE Simulation Question-3

PAPER 1

Question 1 to 10 carry 1 mark each. Question 11 to 15 carry 2 marks each. For each, four options are given. One of them is the correct answer.

1. What does the digit 6 in 7.856 stand for?

- (1) 6 ones
- (2) 6 tenths
- (3) 6 hundredths
- (4) 6 thousandths

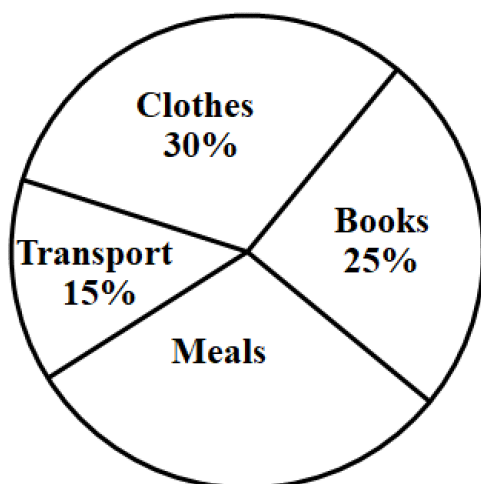
2. Which of the following is equal to $3\frac{5}{8}$?

- (1) 3.425
- (2) $\frac{27}{8}$
- (3) 3.625
- (4) $\frac{25}{8}$

3. Andy paid \$17 for 20 candies. What was the cost of each candy?

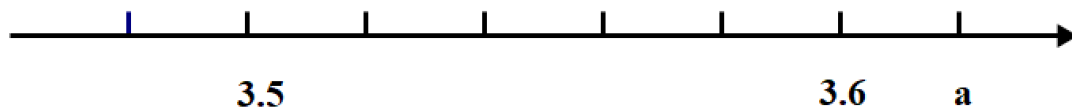
- (1) \$0.85
- (2) \$0.58
- (3) \$1.85
- (4) \$0.55

4. The pie chart shows how Jack spent his money. What is the ratio of the amount of money spent on Meals and Transport?



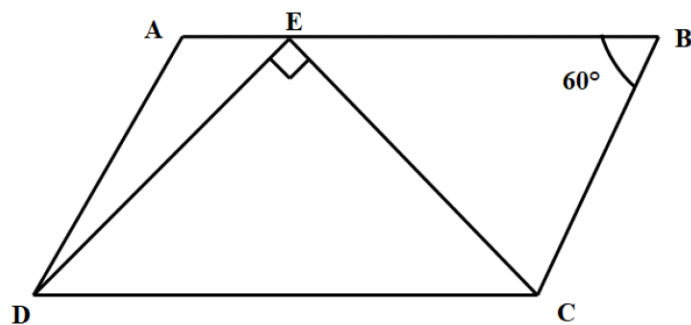
- (1) 3:2
- (2) 2:1
- (3) 4:3
- (4) 1:2

5. In the number line below, what is the value of a ?



- (1) 3.7
- (2) 3.62
- (3) 3.64
- (4) 3.65

6. In the figure, DEC is an isosceles right triangle. ABCD is a parallelogram with $\angle B = 60^\circ$. Find $\angle BCE$.



- (1) 55°
- (2) 65°
- (3) 75°
- (4) 85°

7. By rounding each of the numbers to the nearest whole number, estimate the value of $37.8 + 50.3 \times 9.98 - 30.1$

- (1) 510
- (2) 518
- (3) 538
- (4) 508

8. Which one of the following fractions is nearest to $\frac{1}{5}$?

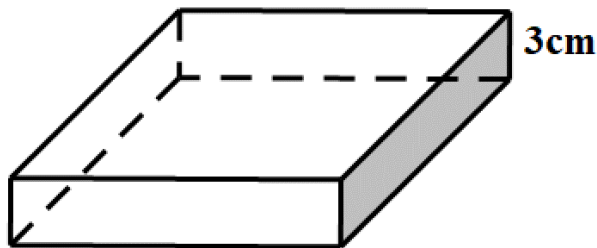
- (1) $\frac{11}{35}$
- (2) $\frac{3}{8}$
- (3) $\frac{4}{25}$
- (4) $\frac{8}{27}$

9. Five letters S, H, U, A, I are shown below. How many of the letters have axis of symmetry?

S H U A I

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

10. The figure shows a cuboid with a square base and a height of 3cm . The volume of the cuboid is 300cm^3 . Find the area of the shaded face.

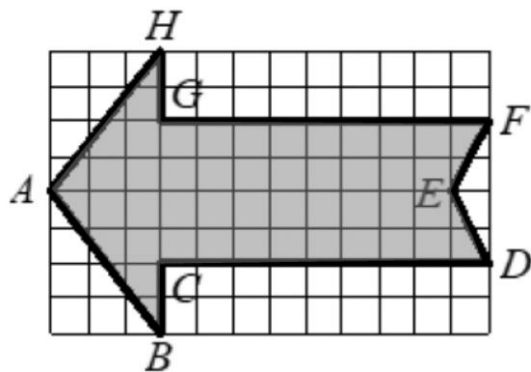


- (1) 27 cm^2
- (2) 30 cm^2
- (3) 33 cm^2
- (4) 36 cm^2

11. A shop gave a discount of \$3 for every \$15 spent. Mary bought a hat and paid \$64. What was the price of the hat before the discount?

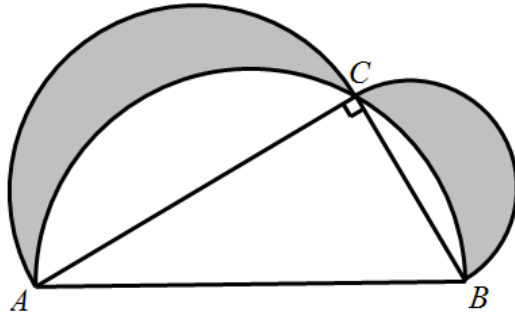
- (1) \$79
- (2) \$81
- (3) \$77
- (4) \$78

12. In the figure below, each grid is a square and the side length of it is 1cm . Find the area of the shaded part.



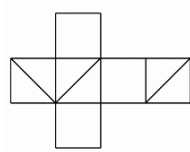
- (1) 30 cm^2
- (2) 36 cm^2
- (3) 46 cm^2
- (4) 50 cm^2

13. In the figure below, $AB = 10$, $AC = 8$ and $BC = 6$. Find the area of the shaded part.

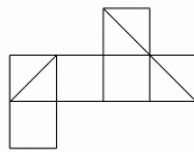


- (1) 20
- (2) 24
- (3) 36
- (4) 48

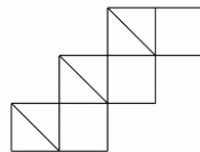
14. The figure shows a cube. Which of the following is a net of the cube?



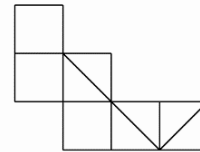
(1)



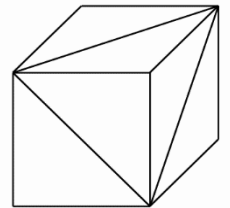
(2)



(3)



(4)



15. Jack read a book at home. He read $\frac{1}{8}$ of the book plus 21 pages on the first week, and read $\frac{1}{6}$ of the book minus 6 pages on the second week. Finally, there are 172 pages left. How many pages are there in this book?

- (1) 200
- (2) 244
- (3) 264
- (4) 284

Question 16 to 20 carry 1 mark each. Question 21 to 30 carry 2 marks each. Write your answer in the spaces provided.

16. Find the value of $3\frac{7}{8} - 2\frac{1}{4}$.

Ans: _____

17. Find the value of $3.87 + 6.5 - 2.9$.

Ans: _____

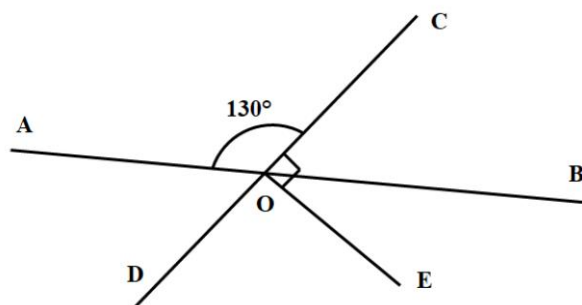
18. Find the value of $8m - 7.3 + m$ when $m = 3$.

Ans: _____

19. Express 0.27% as a fraction.

Ans: _____

20. In the figure, AOB and COD are straight lines. $\angle AOC = 130^\circ$, $\angle COE = 90^\circ$. Find $\angle BOE$.



Ans: _____

21. Three distances are given below. Which is the smallest? Which is the largest?

$5m\ 0.2cm$ $5m\ 20mm$ $5.2m$

Ans: Smallest _____

Largest _____

22. Find the value of 3.58×4 . Give your answer correct to 1 decimal place.

Ans: _____

23. Two whole numbers add up to 715. What is the smallest difference between the two numbers?
Write down these two numbers.

Ans: Smallest difference: _____

Numbers: _____, _____

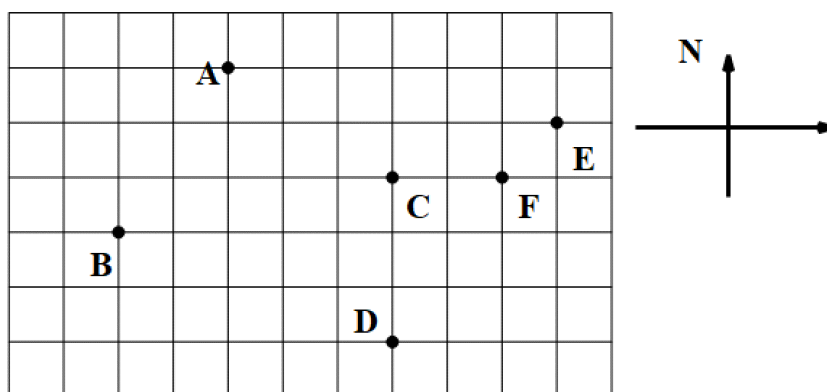
24. Jack had 50 candies and Mary had 38 candies. After Jack gave some of his candies to Mary, the number of candies Jack and Mary had were in the ratio $5:17$. How many candies did Mary have in the end?

Ans: _____

25. Tom took 35 minutes to complete a journey at an average speed of 90 km/h . What was the distance he travelled?

Ans: _____ *km*

26. Six buildings on a map of a city are shown in the grid below.



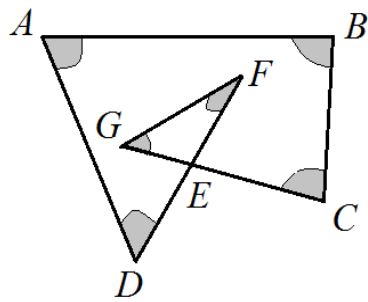
(a) In which direction is A from D?

(b) Timmy is at one of the buildings. He is facing F. When he turns 90° clockwise, he faces D.
Which building is Timmy at?

Ans: (a) _____

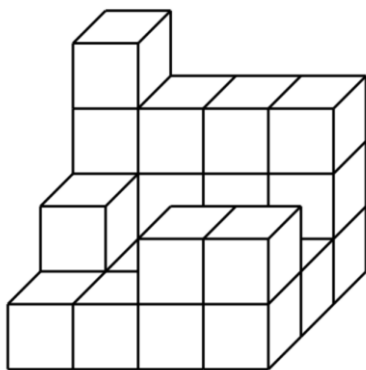
(b) _____

27. Find $\angle A + \angle B + \angle C + \angle D + \angle F + \angle G$.



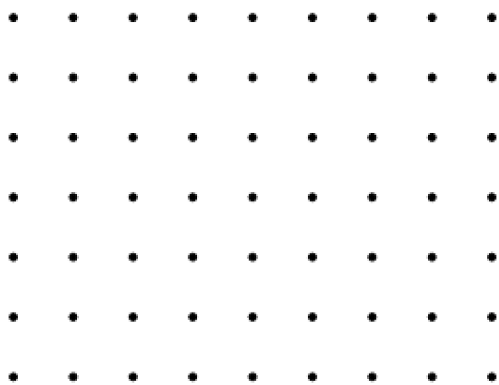
Ans: _____

28. The solid below is made up of some cubes.



↗
Front view

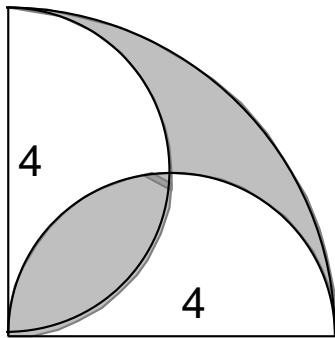
(a) Draw the front view of the solid on the grid below.



(b) Find the number of the smallest cubes in the solid.

Ans (b) _____

29. Find the area of the shaded part. Take $\pi = 3.14$.



Ans: _____

30. Alex has a stick. He cuts off $\frac{1}{2}$ of the length of the stick for the first time, $\frac{1}{3}$ of the length of the rest of the stick for the second time, $\frac{1}{4}$ of the length of the rest of the stick for the third time and $\frac{1}{5}$ of the length of the rest of the stick for the fourth time. Finally, the length of the stick is 6cm . Find the length of the stick at the beginning.

Ans: _____ *cm*

PAPER 2

Question 1 to 5 carry 2 mark each. Show your working clearly and write your answer in the spaces provided. For questions which require units, give your answers in the units stated.

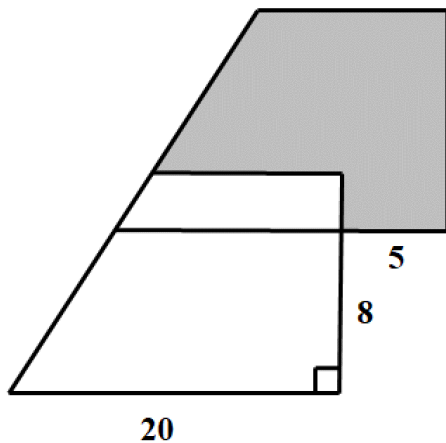
1. Mary made 45 cups of milk tea. For every 9 cups of milk tea, Mary used 5 bottles of milk. How many bottles of milk did she use altogether?

Ans: _____

2. The number of students in a school was 7280 in 2021. This was a 30% increase from the number in 2020. How many students were there in 2020?

Ans: _____

3. There are two congruent right-angled trapezoids in the figure below. Find the area of the shaded part.



Ans: _____

4. James took 3 hours to travel $\frac{5}{9}$ of a journey. He completed the remaining 36km in 1.5 hours. What was his average speed for the whole journey?

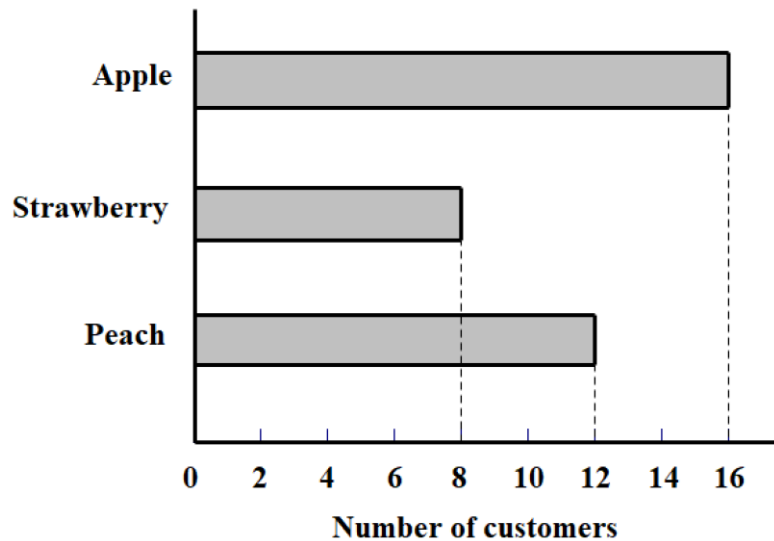
Ans: _____ km / h

5. Ben had \$450 more than Alex at first. After Ben gave some of his money to Alex, he had \$50 less than Alex. How much money did Ben give to Alex?

Ans: \$ _____

For question 6 to 17, show your working clearly and write your answer in the spaces provided. (45 marks)

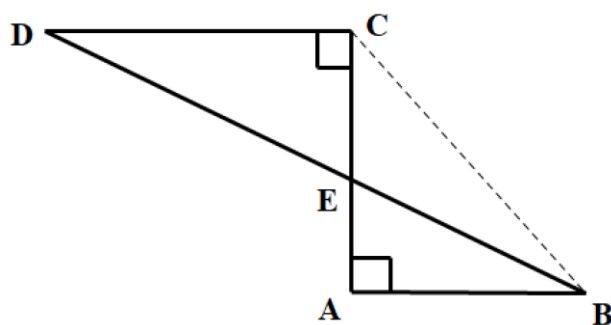
6. Tony asked some customers to choose their favourite fruit. The results are shown in the graph below.



- (a) What is the ratio of the number of customers who chose apple to the number who chose strawberry to the number who chose peach?
- (b) Tony bought a total of 720 apples, strawberry and peach according to the same ratio in part (a). How many more apples than peaches were bought?

Ans: (a) _____
(b) _____

7. In the figure below, $CA = AB = 4$, $S_{\triangle CDE} - S_{\triangle ABE} = 2$. Find the length of CD .

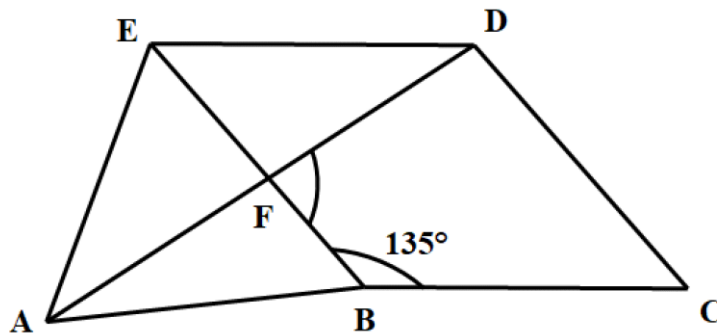


Ans: _____

8. Jerry was given a job to collect 294 stamps. He collected 6 stamps each day from Monday to Friday and 12 each day on Saturday and Sunday. Starting on a Saturday, on which day of the week did Jerry complete the job?

Ans: _____

9. In the figure below, AEB is an equilateral triangle and BEDC is a rhombus. $\angle FBC = 135^\circ$. Find $\angle DFB$.

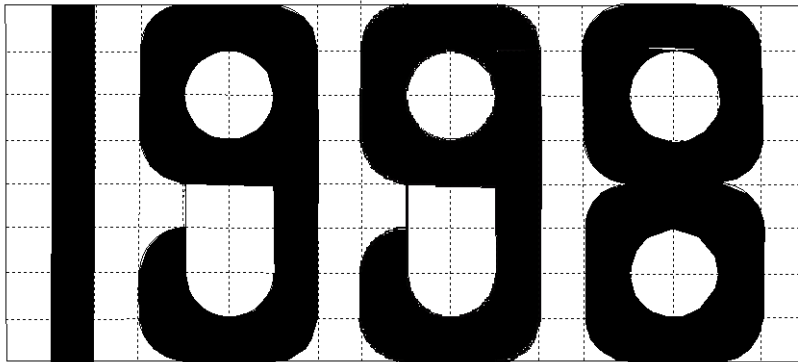


Ans: _____

10. Jack had some stickers. He gave $\frac{2}{7}$ of his stickers to his brother and $\frac{2}{5}$ of the rest of the stickers to his sister. Finally, the number of stickers which he gave to his brother and sister was 10 more than the rest of the stickers. Find the number of stickers at first.

Ans: _____

11. In the figure below, each grid is a square and the side length of it is 1cm . What fraction of the shaded area of the whole square paper?



Ans: _____

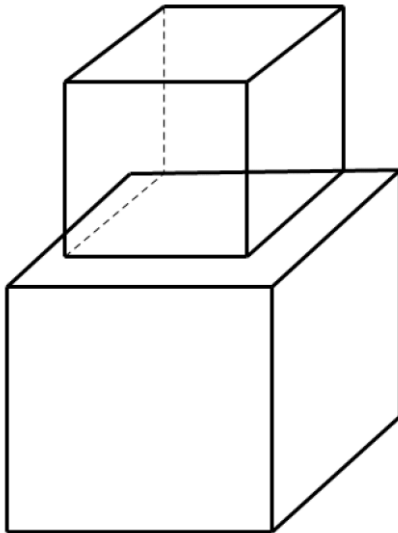
12. There are 615 students in grade four, five and six. Given that $\frac{1}{2}$ of the number of students in grade six is equal to $\frac{2}{5}$ of the number of students in grade five and is also equal to $\frac{3}{7}$ of the number of students in grade four. Find the number of students in grade five.

Ans: _____

13. The price of a toy is \$3. If Jack buys this toy, the ratio of the rest of Jack's money to the amount of Mary's money will be $2:5$. If Mary buys this toy, the ratio of the amount of Jack's money to the rest of Mary's money will be $8:13$. Find the amount of Jack's money.

Ans: \$ _____

14. Put a small cube whose side length is 4 on top of a big cube whose side length is 5. Find the area of the surface of this solid figure.



Ans: _____

15. A sports shop spent \$3000 buying 50 footballs and 40 basketballs. The selling price of football was 9% more than the purchasing price of it. The selling price of basketball was 11% more than the purchasing price of it. After selling out these footballs and basketballs, the shop got a profit of \$298.

- (a) Find the purchasing price of each football.
- (b) Find the purchasing price of each basketball.

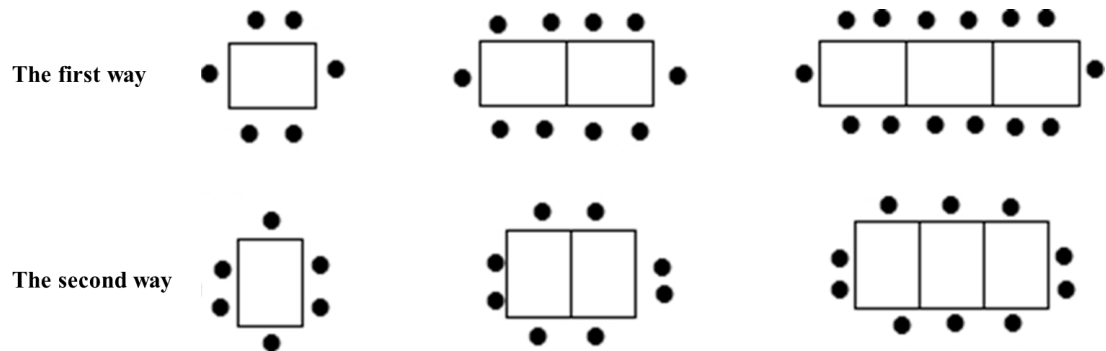
Ans: (a) \$ _____

(b) \$ _____

16. In this year, Tom's age is $\frac{1}{4}$ of his father's age. 15 years later, Tom's age will be $\frac{5}{11}$ of his father's age. Find Tom's age in this year.

Ans: _____

17. In a restaurant, 6 people can sit at one table. There are two ways to place tables as shown in the figure below.



(a) How many people can sit in the first way when there are n tables?

(b) How about the second way?

(Express your answer in terms of n)

Ans: (a) _____

(b) _____