

## 2022 PSLE Simulation Question-1

### 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. In 31.745, which digit is in the tenths place?

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

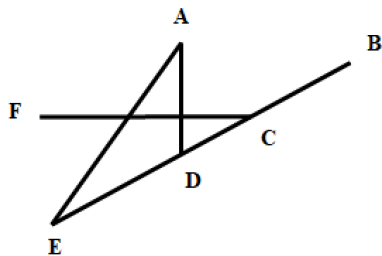
2. Which number is the largest?

- (1) 3.732
- (2) 0.3732
- (3) 7.3732
- (4) 0.0372

3. Which of the following is the same as 18 km 30 m?

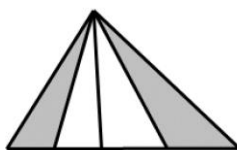
- (1) 1830 m
- (2) 1803 m
- (3) 18300 m
- (4) 18030 m

4. Which two lines are perpendicular to each other?

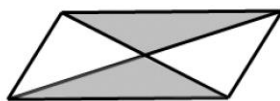


- (1) CF and AD
- (2) BE and AD
- (3) CF and AE
- (4) CD and CF

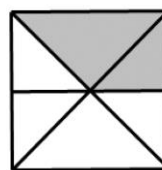
5. Which of the following shows  $\frac{1}{4}$  of the figure shaded?



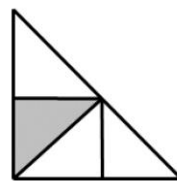
(1)



(2)



(3)

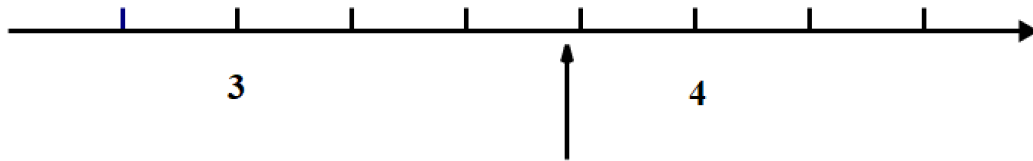


(4)

6. Express  $7\frac{1}{20}$  as a decimal.

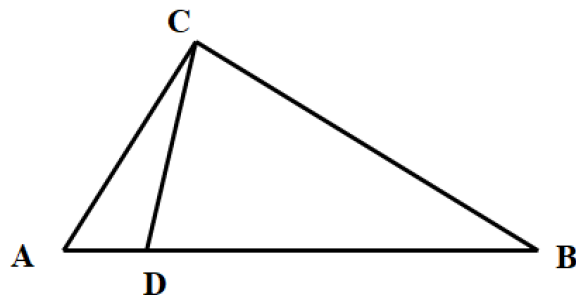
- (1) 7.02
- (2) 7.05
- (3) 7.50
- (4) 7.20

7. In the number line, which of the following is closest to the reading shown?



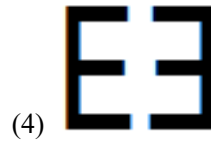
- (1)  $3\frac{1}{4}$
- (2)  $3\frac{3}{8}$
- (3)  $4\frac{1}{7}$
- (4)  $3\frac{11}{16}$

8. ADB is a straight line. Given that  $\angle ACB = 90^\circ$ ,  $\angle ACD = 20^\circ$  and  $\angle BCD = \angle BDC$ . Find  $\angle CAD$ .



- (1)  $30^\circ$
- (2)  $45^\circ$
- (3)  $50^\circ$
- (4)  $55^\circ$

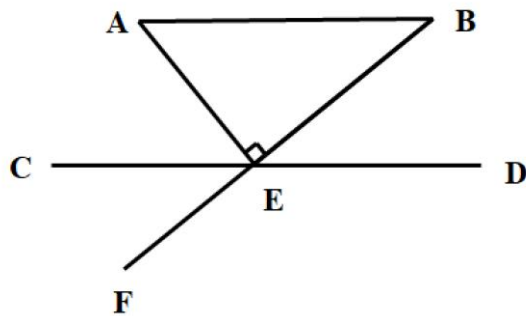
9. Each figure below is made up of 2 letter “E”. Which one doesn’t have a line of symmetry?



10. At first, Jack and Tony were facing the same direction. Then Jack turned  $120^\circ$  clockwise to face south and Tony turned  $100^\circ$  anti-clockwise. Which direction did Tony face in the end?

- (1) South-East
- (2) South-West
- (3) North-West
- (4) North-East

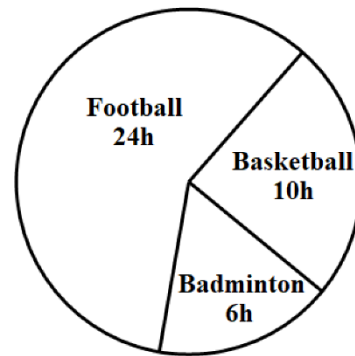
11. In the figure below, AB is parallel to CD and AE is perpendicular to BF,  $\angle CEF = 35^\circ$ . Find  $\angle A$ .



- (1)  $35^\circ$
- (2)  $45^\circ$
- (3)  $55^\circ$
- (4)  $65^\circ$

12. The pie chart shows how much time Jack spent on various sports. What fraction of the time did he spend on football?

- (1)  $\frac{1}{5}$
- (2)  $\frac{3}{5}$
- (3)  $\frac{2}{7}$
- (4)  $\frac{3}{8}$



13. What is the value of  $w + \frac{3w}{16} - 3$  when  $w = 8$ ?

- (1) 4.8
- (2) 5.5
- (3) 3.2
- (4) 6.5

14. There are 1000 students in a school. 60% of the students are boys and the rest are girls. Given that 44% of the students participate in sports competitions and 52% of the boys participate in sports competitions. How many girls participate in sports competitions?

- (1) 128
- (2) 272
- (3) 440
- (4) 600

15. A book has 120 pages. Jack read  $\frac{2}{5}$  of the book on the first day, and read  $\frac{1}{3}$  of the rest on the second day. Which page should Jack start on the third day?

- (1) 50
- (2) 67
- (3) 73
- (4) 82

**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  $1024 - 53$

Ans: \_\_\_\_\_

17. Find the value of  $150 \times 23$

Ans: \_\_\_\_\_

18. Express  $\frac{27}{45}$  as a decimal.

Ans: \_\_\_\_\_

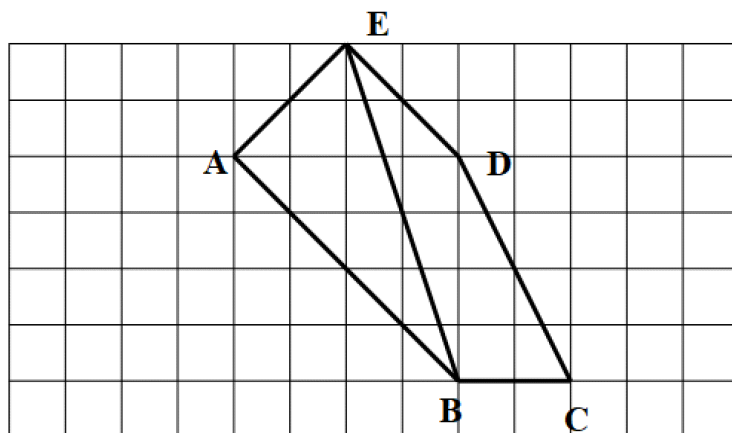
19. Find the value of  $13.77 - 0.93$

Ans: \_\_\_\_\_

20. Find the value of  $4 - \frac{3}{5} - \frac{2}{3}$

Ans: \_\_\_\_\_

*Refer to the figure below to answer question 21 to 22.*



21. Name two lines that are parallel to each other.

Ans: \_\_\_\_\_ and \_\_\_\_\_

22. Name two lines that are perpendicular to each other.

Ans: \_\_\_\_\_ and \_\_\_\_\_

23. Tony has \$23.3 in his pocket. Jack has \$7.4 more money than Tony. How much money does Jack have?

Ans: \$ \_\_\_\_\_

24. Eric took 15 min to walk 960 m. What was his average speed in km/h?

Ans: \_\_\_\_\_

25. Cyndi has 95 red and blue balls. One half of the red ball is as much as one third of the blue ball. The difference between the two balls is \_\_\_\_\_.

Ans: \_\_\_\_\_

26. Use all the digits 1, 3, 5, 7 to form

(a) the smallest multiple of 5

(b) the number closest to 5000

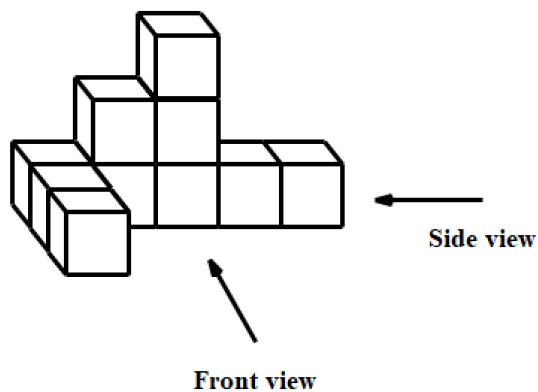
Ans: (a) \_\_\_\_\_

Ans: (b) \_\_\_\_\_

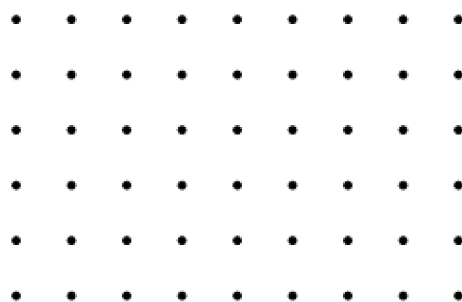
27. Mary wants to buy some violins. If she buys 5 violins, she will have \$150 left. If she buys 8 violins, she will have \$30 left. How much money does she have?

Ans: \$ \_\_\_\_\_

28. Tom builds a solid using 10 unit cubes.



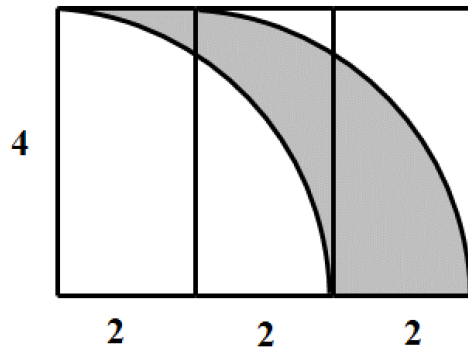
(a) Draw the front view on the grid.



(b) Find the greatest number of unit cubes Tom can add to the solid without changing the front view and side view.

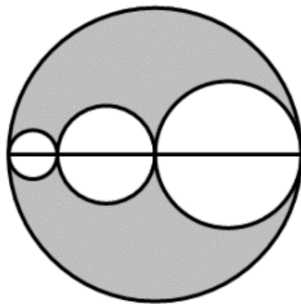
Ans: (b) \_\_\_\_\_

29. As the figure shown, find the area of the shaded part. ( $\pi=3.14$ )



Ans: \_\_\_\_\_

30. There is a circle whose diameter is 6cm with three smaller circles inside it arranged side by side, of which the diameters are 1cm, 2cm and 3cm. Remove the three smaller circles. Find the rest shaded area. ( $\pi=3.14$ )



Ans: \_\_\_\_\_  $cm^2$

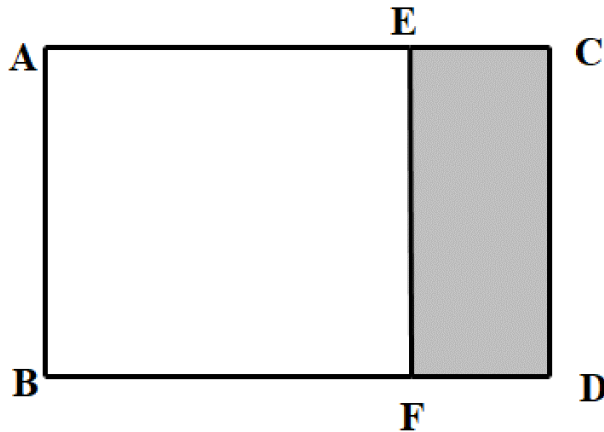
PAPER 2

**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. The average of 8 numbers is 130. One of the numbers is 25. What is the average of the other 7 numbers?

Ans: \_\_\_\_\_

2. In the figure below, the total perimeter of rectangle ABDC is 30cm. ABFE is a square and the perimeter of rectangle EFDC is 16cm. Find the area of ABDC.



Ans: \_\_\_\_\_ cm<sup>2</sup>

3. Jerry started walking from home at 9.30 a.m. to the school, which was 1300m away. He walked at 65 m/min. At what time did he reach the market?

Ans: \_\_\_\_\_

4. Dom has some cards in three colours: red, green and white.  $\frac{3}{7}$  of the cards are red. The number of red cards is twice the number of green cards. What fraction of the cards are white?

Ans: \_\_\_\_\_

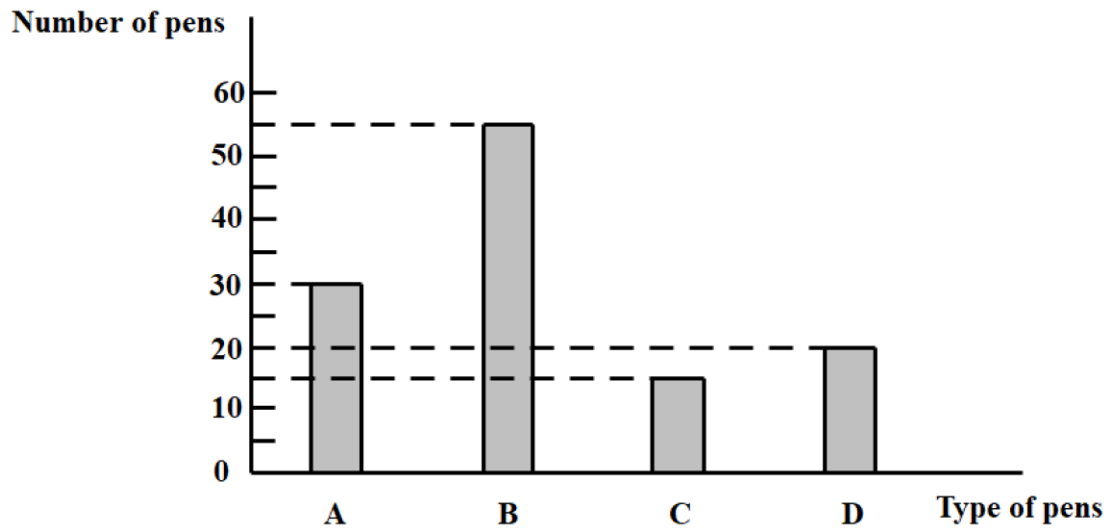
5. At the beginning,  $\frac{1}{3}$  of the members in a club are girls. After 3 girls joined this club, the proportion became  $\frac{4}{9}$ . Find the number of girls in this club at the beginning.

Ans: \_\_\_\_\_



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

6. The bar graph shows the number of each type of pens sold by a shop.



The table shows the prices of the pens.

Type of pen	Price per pen
A	\$5.00
B	\$2.50
C	\$3.00
D	\$1.80

(a) What fraction of the pens sold were type A? Give your answer in the simplest form.

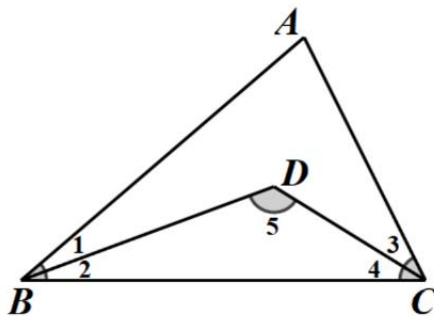
(b) From the sale of which type of pens did the shop collect the most money? What was the amount of money?

Ans: (a) \_\_\_\_\_

(b) Type: \_\_\_\_\_

Amount: \_\_\_\_\_

7. As the figure shown,  $\angle 1 = \angle 2$ ,  $\angle 3 = \angle 4$ ,  $\angle 5 = 130^\circ$ . Find  $\angle A$ .

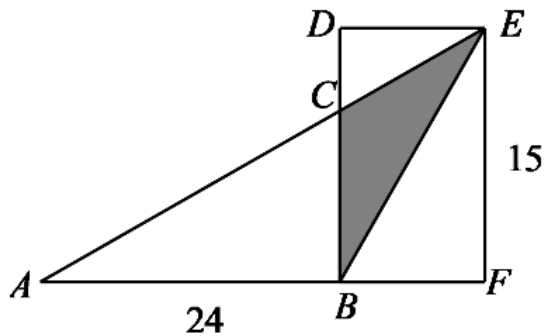


Ans: \_\_\_\_\_

8. 80% of the teachers in a school are female. If there are five fewer female teachers and five more male teachers, the percentage of male teachers will be 30%. Find the difference between female teachers and male teachers.

Ans: \_\_\_\_\_

9. As the figure shown,  $AB = 24\text{cm}$ . In rectangle BDEF,  $EF = 15\text{cm}$ , the area of  $\triangle BCE$  is  $60\text{cm}^2$ . Find the area of  $\triangle DCE$ .

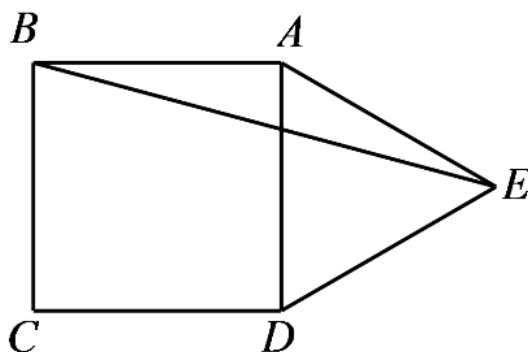


Ans: \_\_\_\_\_  $\text{cm}^2$

10. At first, the ratio of the amount of Jack's money to the amount of Mary's money was  $6:5$ . After Jack got \$180 and Mary got \$30, the ratio became  $18:11$ . Find the sum of their money at first.

Ans: \$ \_\_\_\_\_

11. ABCD is a square and  $\triangle ADE$  is a regular triangle. Find  $\angle AEB$ .



Ans: \_\_\_\_\_

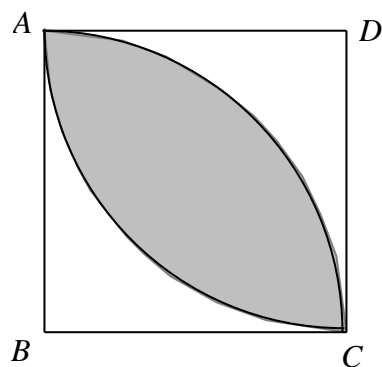
12. Jack used \$5 to buy two chicken legs and a bottle of beer. After prices rose by 20%, \$5 could buy a chicken leg and a bottle of beer. When prices rise by another 20%, find the price of a bottle of beer.

Ans: \$ \_\_\_\_\_

13. Alex read a story book. He read  $\frac{1}{5}$  of the book plus 60 pages on the first day, and read  $\frac{1}{4}$  of the book minus 60 pages on the second day. Finally, there are 220 pages left. How many pages are there in this book?

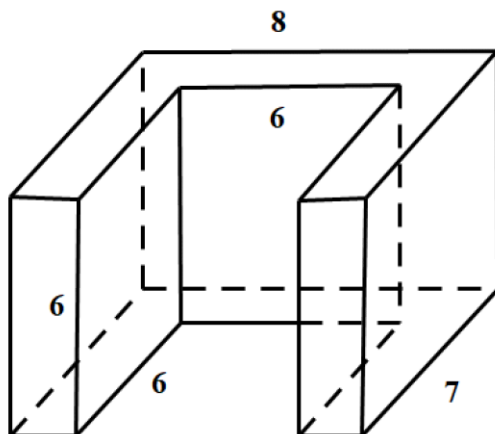
Ans: \_\_\_\_\_

14. As shown in the figure, the side length of the square ABCD is 4 cm. Draw circles whose centres are B and D and the radius are 4 cm inside the square. Find the area of the shaded part. (Take  $\pi=3$  )



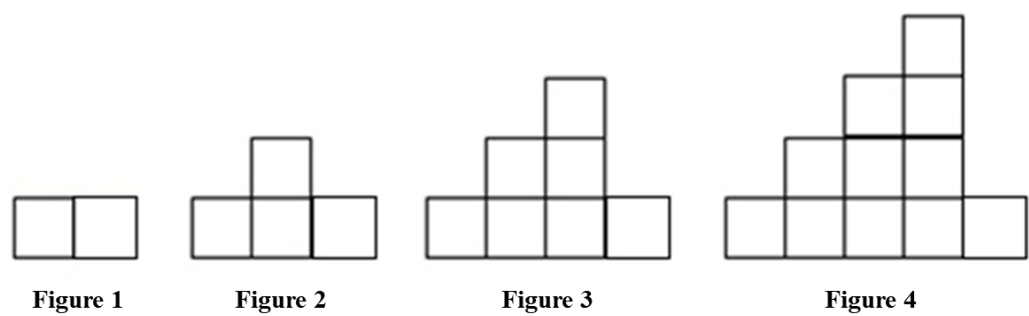
Ans: \_\_\_\_\_  $cm^2$

15. The length of a cuboid is 8cm, the width of it is 7cm and the height of it is 6cm. Cut the largest cube from this cuboid. (As the figure shown below) Find the sum of the surface areas of the rest parts.



Ans: \_\_\_\_\_  $cm^2$

16. Tony uses matches to form figures that follow a pattern. The first four figures are shown below.



The table shows the number of matches used for each figure.

Figure Number	1	2	3	4	...	11
Number of matches	7	13	21	31	...	

Fill in the table for Figure 11.

Ans: \_\_\_\_\_

17. The supermarket expected to make a profit of \$72000 by selling a batch of refrigerators at \$2400 each, but the profit was reduced by 25% because production costs rose by  $\frac{1}{6}$ . Find the number of refrigerators in this batch.

Ans: \_\_\_\_\_