

SECTION 1

1. What is the value of the digit 5 in the number 857 269?

Answer _____

2. Round 673 829 to the nearest thousand.

Answer _____

3. A set of numbers is shown below.

3 625	4 218	4 125	3 904
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Which number is larger than 3 869 but smaller than 4 115?

Answer _____

4. Find the missing digit in the addition problem below.

$$\begin{array}{r} 3 \quad 4 \quad 2 \quad 5 \\ + \quad \square \quad 7 \quad 8 \\ \hline 4 \quad 1 \quad 0 \quad 3 \\ \hline \end{array}$$

Answer _____

5. $9 \overline{) 7686}$

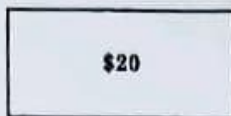
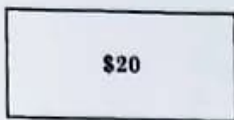
Answer _____

6. Insert the missing element in the number pattern below.

3 7 12 18 _____

Answer _____

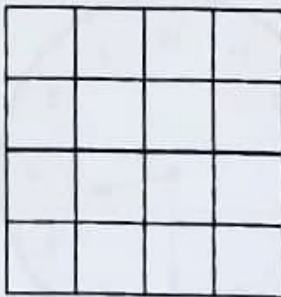
7. Asha purchased a notebook costing \$36.25. She paid with the bills shown below.



How much change should she receive?

Answer \$ _____

8. Shade $\frac{3}{4}$ of the squares in the diagram below.



9. Arrange the decimal fractions below in ascending order.

0.7 1.7 0.07 0.17

Answer _____



10. The cost of a shirt is \$80 plus $12\frac{1}{2}\%$ VAT.

Calculate the total cost of the shirt.

Answer \$ _____

11. Gary started football practice at the time shown on the clock below.

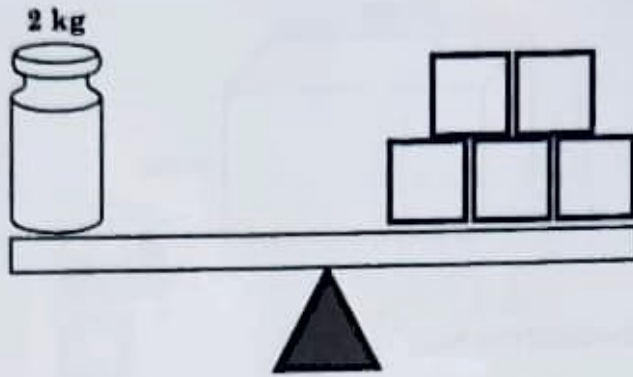


On the digital clock below, write the time Gary started his football practice.

Answer

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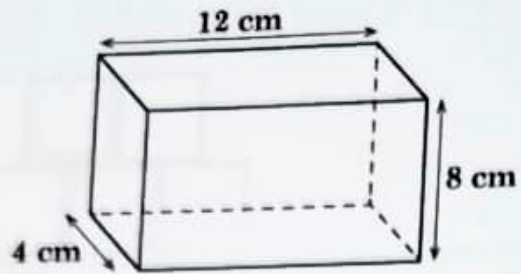
12. Five identical boxes and a 2-kilogram weight are shown on the balance below.



What is the mass of each box, in grams?

Answer _____ grams

13. A box has dimensions as shown below.



Calculate the volume of the box.

Answer _____ cm^3

14. A carton of milk and a bottle of milk are shown below.



400 ml

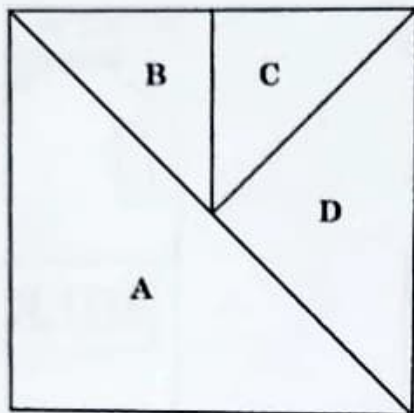


The volume of the milk in the carton is $\frac{1}{5}$ of the volume of the milk in the bottle.

What is the volume of the milk in the bottle, in litres?

Answer _____ litres

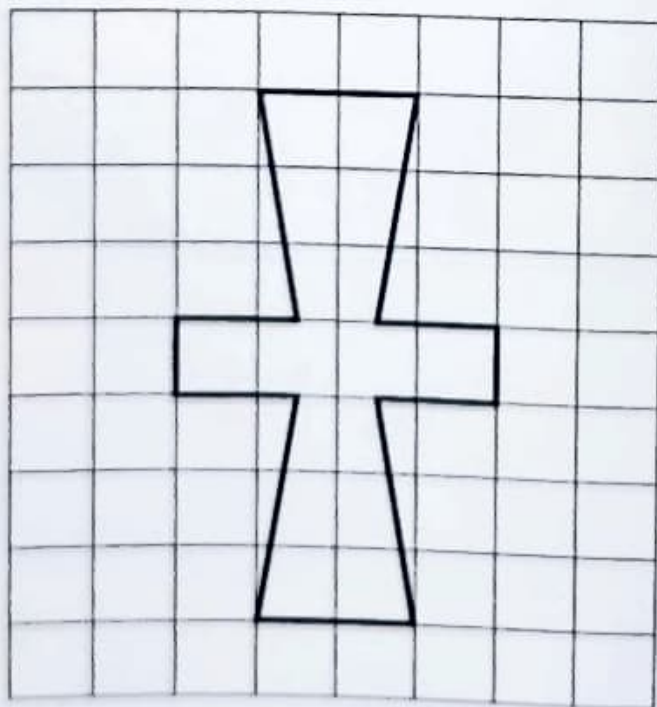
15. A square is divided into four triangles, A, B, C, D, as shown below.



Which two triangles form a trapezium?

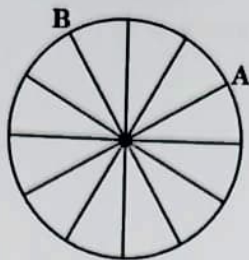
Answer _____

16. How many lines of symmetry are there in the shape below?



Answer _____ lines of symmetry

17. Point A on the wheel below moved in a clockwise direction to Point B.



State the number of quarter turns made.

Answer _____ quarter turns

18. The shoe sizes of the persons in a family are shown below.

5 8 7 9 8 10 8 10

What is the modal shoe size?

Answer _____

19. The mean of 6 numbers is 91.

Calculate the sum of the 6 numbers.

Answer _____

20. The tally chart below shows the favourite subjects of students in a class.

Students' Favourite Subjects

Subject	No. of Students
Mathematics	
Music	
Science	
Social Studies	

There are 40 students in the class.

Complete the tally chart to show the number of students whose favourite subject is Social Studies.

SECTION 2

21. Calculate

$$8 - 1\frac{3}{5}$$

Answer _____

(2 marks)

22. Josh packed 257 pens into boxes of 5. The last box was **not** filled.

How many **more** pens are needed to fill the last box?

Answer _____ pens

(2 marks)

23. Khea planted lettuce seedlings and pepper seedlings. For every 6 lettuce seedlings, she planted 8 pepper seedlings. Khea planted a total of 180 lettuce seedlings.

How many pepper seedlings did Khea plant?

Answer _____ pepper seedlings (2 marks)

24. Store A and Store B are offering discounts on the same television as shown below.



Store A



Store B

Explain which store has the better offer.

Show all working.

Answer

25. Sam works a 40-hour week, Monday to Friday, at \$18 per hour. On Saturday, he works for \$25 per hour. Last week, Sam worked from Monday to Saturday and earned \$845.

How many hours did Sam work on Saturday?

Answer _____ hours (3 marks)

26. At a magic show, $\frac{3}{8}$ of the audience are adults. There are 600 more children than adults.

How many children attended the magic show?

Answer _____ children (3 marks)

27. The table below shows the number of oranges bought by each student in a class.

Number of Oranges	1	2	3	4	5
Number of Students	9			3	4

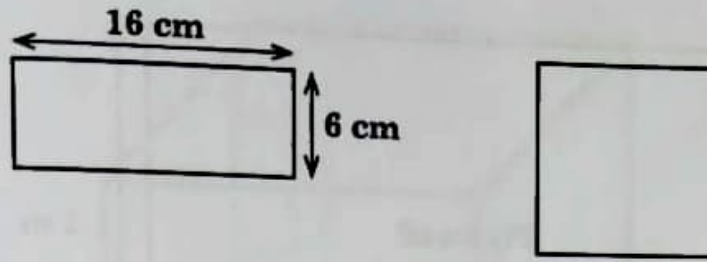
There were 20 students who bought less than 3 oranges.

The number of students who bought 3 oranges was twice the number of students who bought 5 oranges.

How many students were there in the class?

Answer _____ students (3 marks)

29. The rectangle and square shown below have the same perimeter.

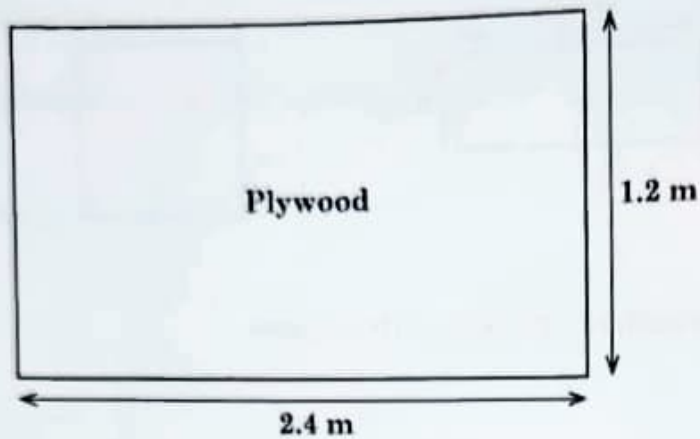


Calculate the length of one side of the square.

Answer _____ cm

(2 marks)

30. A sheet of plywood is shown below.



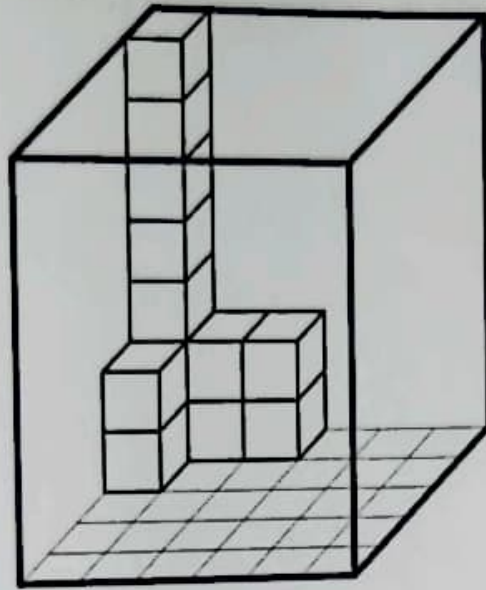
A square with side 1 m is cut from the sheet of plywood.

Calculate the area of the remaining plywood.

Answer _____ m^2

(2 marks)

31. Identical cubes are placed in a box as shown below.



How many more cubes are needed to fill the box completely?

Answer _____ cubes (3 marks)

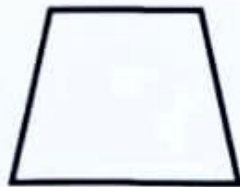
32. A ribbon with a length of 1 m 13 cm is cut into three pieces. The second piece is 15 cm longer than the first piece. The third piece is twice as long as the second piece. What is the length of the first piece of ribbon?



Answer _____ cm

(3 marks)

33. Four quadrilaterals are shown below.

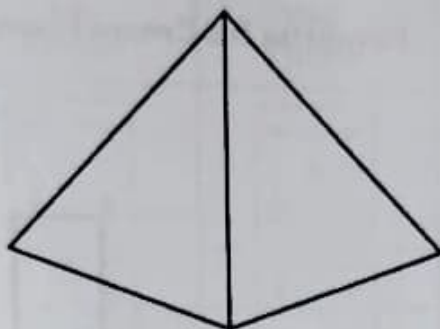


Write the names of the quadrilaterals that match the properties given.

Name of Quadrilateral	Lines of Symmetry	Right Angles
_____	2	0
_____	4	4

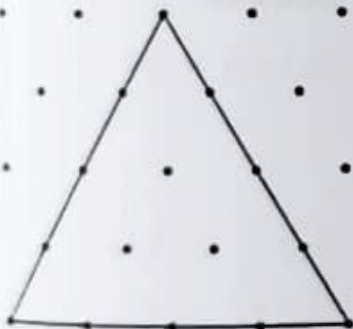
(2 marks)

34. A triangular-based pyramid is shown below.



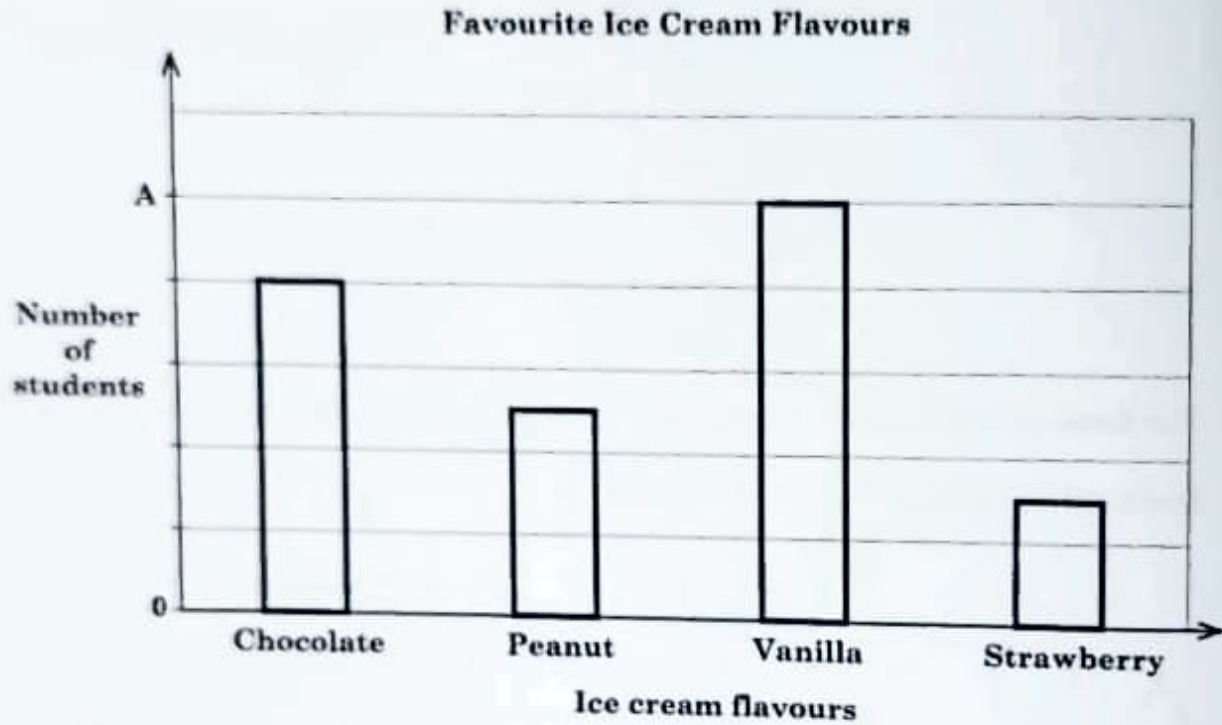
The **base** of the pyramid is an equilateral triangle as shown on the grid below.

Draw all the remaining faces on the grid.



(2 marks)

35. The bar graph below shows students' favourite ice cream flavours.










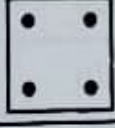
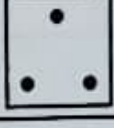
Strawberry is the favourite ice cream flavour of 6 students.

What number is represented by A?

Answer _____

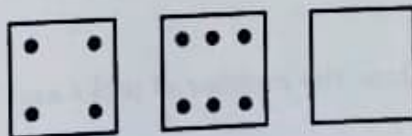
(2 marks)

36. The diagram below shows the scores of three girls in a dice roll game.

Girl	1st Throw	2nd Throw	3rd Throw
Sue			
Mia			
Jess			

Ria joined the game. After her three dice rolls, the mean score of the four girls increased to 11.

Draw the number of dots for Ria's third dice.



(3 marks)

SECTION 3

37. The table below shows the points awarded for each card picked in a card game.

Points Awarded in a Card Game

Card	Card Point	No. of Picks	Total Points
Ace	30		
King	20		
Queen	10		
Jack	5		
Total		12	155

Anil scored a total of 155 points in 12 picks. He picked the same number of aces and kings.

Complete the table to show the number of picks and the total points for each card.

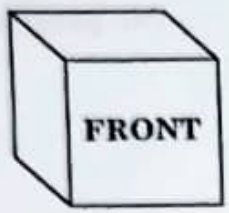
(4 marks)

38. The maximum time Garris can remain in a video game is 5 minutes. He earns 1 point for every 15 seconds he remains in the game. He also earns a prize for every 6 points scored.

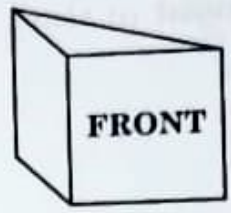
What is the **least amount of time** Garris must stay in the game to win the most prizes?

Answer _____ minutes _____ seconds (4 marks)

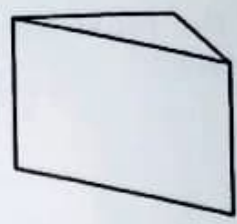
39. A cube is cut into halves to create two identical prisms as shown below.



Cube



Prism A



Prism B

(a) The plane shape at the base of the cube is shown on the grid below. On the same grid, complete the drawing of the plane shape at the base of Prism A.

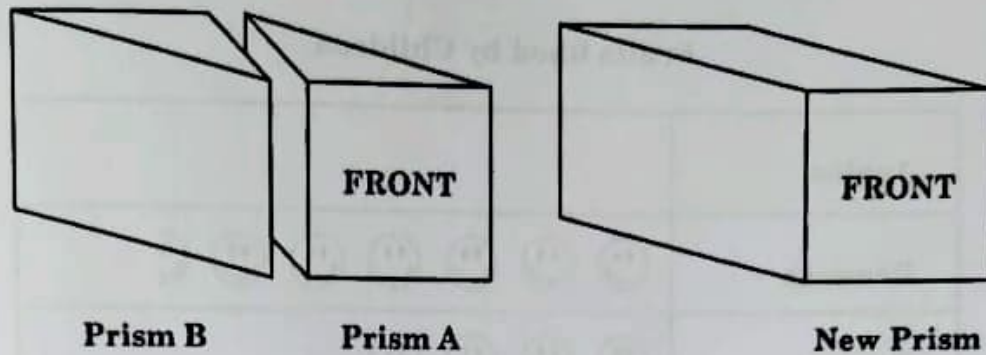


Base of Cube

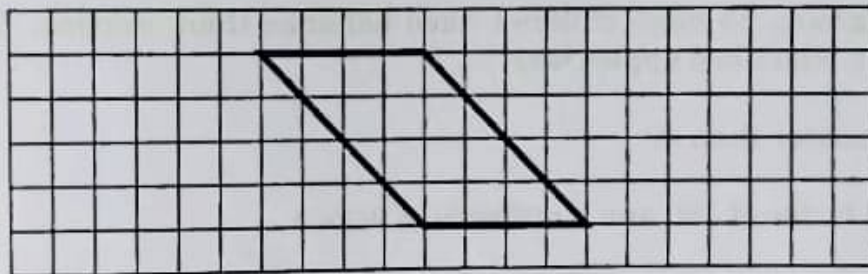
Base of Prism A

(2 marks)

- (b) Prism A and Prism B are joined at two square faces to form a new prism as shown below.



The plane shape at the base of the new prism is shown on the grid below.



Base of New Prism

State **two similarities** between the cube and the new prism.




Answer (1) _____

(2) _____

(2 marks)

40. The incomplete pictograph below represents the fruits liked by children in a group.

Fruits liked by Children

Apples	
Bananas	
Grapes	
Oranges	

In the group, 55 more children liked bananas than oranges. The number of children who liked apples was

- greater than 40
- a factor of 180 and a multiple of 9
- the second largest number

Complete the pictograph to show the number of children who liked apples.

(4 marks)