

Date: 29/03/2026

Class: SEA Mathematics

Title: SEA Math 2026 Solutions

1. What is the value of the digit 5 in the number 857269?

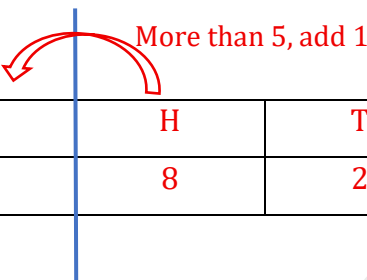
HTH	TTH	TH	H	T	0
8	5	7	2	6	9

$$5 \times 10,000 = 50,000$$

Answer 50,000

2. Round 673,829 to the nearest thousand.

HTH	TTH	TH	H	T	O
6	7	3	8	2	9



The digit after the thousand columns (8, in the hundreds) column is more than 5 hence, 1 is added to the 3 in the thousands place.

Answer _____ **674,000**

3. A set of numbers is shown below.

3625	4218	4125	3904
------	------	------	------

Which number is larger than 3869 but smaller than 4115?

3625	4218	4125	3904
------	------	------	------

3625

→ Less than 3869 (too small)

4218

→ Greater than 4115 (too large)

4125

→ Greater than 4115 (too large)

3904

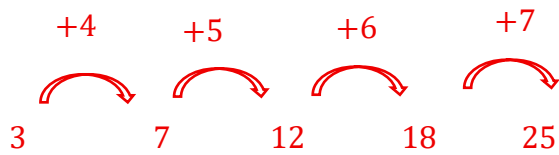
→ Greater than 3869

→ Less than 4115

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

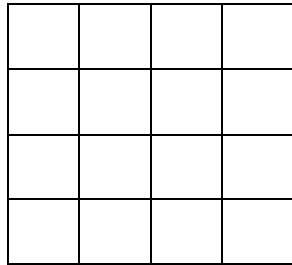
3 7 12 18

Find the rule

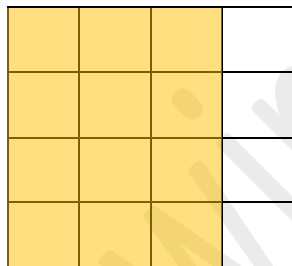


Answer _____ 25

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



$$\frac{3}{4} \times \frac{16}{1} = 12$$



9. Arrange the decimal fractions below in ascending order.

0.7 1.7 0.07 0.17

To arrange in ascending order (smallest to largest), first make all decimals the same length:

0.70

1.70

0.07

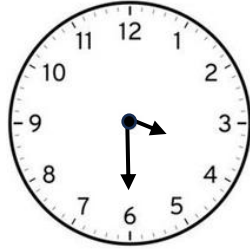
0.17

Now compare:

- 0.07 (smallest)
- 0.17
- 0.70
- 1.70 (largest)

Answer 0.07, 0.17, 0.7, 1.7

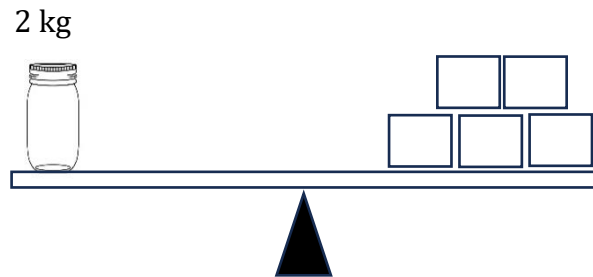
11. Gary started football practice at the time shown on the clock below.



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

3 : 30

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



What is the mass of each box, in grams?

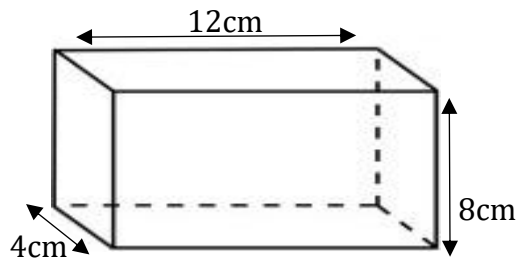
$$2000 \text{ grams} = 5 \text{ boxes}$$

$$1 \text{ box} = 2000 \text{ g} \div 5$$

$$= 400 \text{ g}$$

Answer _____ 400 grams _____

13. A box has dimensions as shown below.



Calculate the volume of the box.

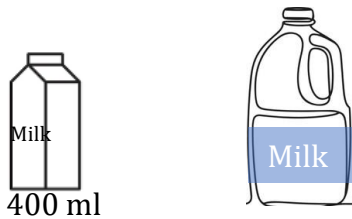
Volume of a cuboid = Length \times Width \times Height

$$= 12\text{cm} \times 4\text{cm} \times 8\text{cm}$$

$$= 384$$

Answer: 384 cm³

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



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?

Step 1: Write what is given

$$\text{Carton} = \frac{1}{5} \text{ of bottle}$$

Step 2: Use reciprocal (flip the fraction)

To find the bottle:

$$\frac{5}{1} \times 400 \text{ ml}$$

$$\text{Bottle} = 400 \times 5$$

$$= 2000 \text{ ml}$$

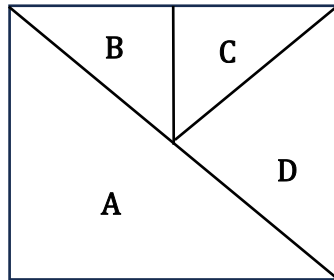
Step 3: Convert to litres

$$2000 \div 1000 = 2 \text{ L}$$

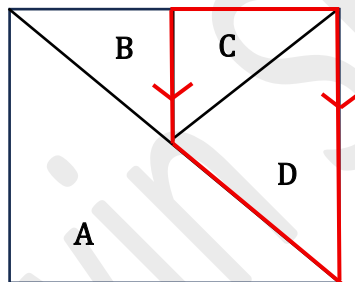
Answer: _____ **2 litres** _____

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

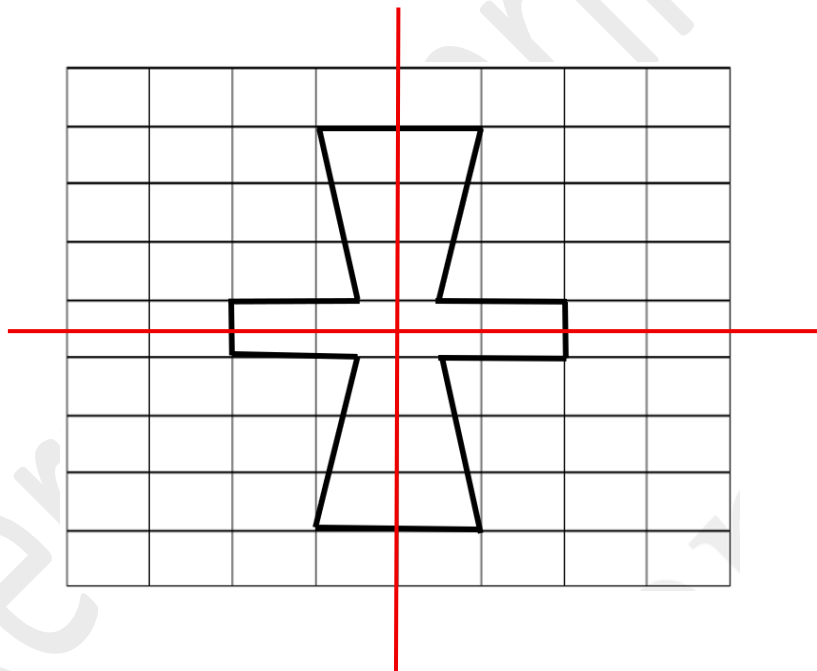
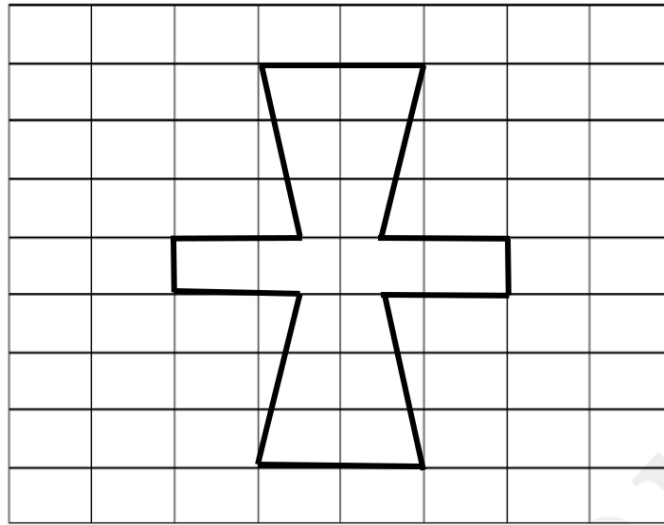


Which two triangles form a trapezium?



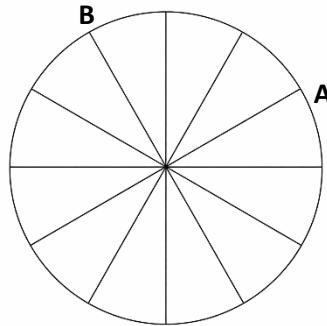
Answer: C and D

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

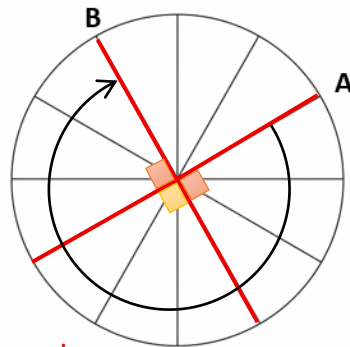


Answer: 2 lines

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



State the number of quarter turns made.



Answer: 3 quarter turns

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

5 8 7 9 8 10 8 10

What is the modal shoe size?

Count each number

- 5 → 1 time
- 7 → 1 time
- 8 → 3 times
- 9 → 1 time
- 10 → 2 times

Identify the mode

The number that appears the most is 8.

Answer: _____ 8 _____

19. The mean of 6 numbers is 91.

Calculate the sum of the 6 numbers.

Step 1:

Mean = 91

Number of values = 6

Step 2:

Sum = Mean \times Number of values
= 546

Answer: _____ 546

20. Complete the tally chart below to show Jaheem's cricket score.

Student's Favourite Subjects

Subject	No. of Students
Mathematics	IIII II
Music	IIII IIII IIII
Science	IIII IIII
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.

First, find how many students are already counted:

- Math = 7
- Music = 14
- Science = 9

Add them:

$$7 + 14 + 9 = 30 \text{ students}$$

There are 40 students in total, so the number who like Social Studies is:

$$40 - 30 = 10 \text{ students}$$

Subject	No. of Students
Mathematics	III II
Music	III III III
Science	III III
Social Studies	III III

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21. Calculate

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

Step 1: Convert the mixed number to an improper fraction

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

Step 2: Convert 8 to a fraction with denominator 5

$$8 = \frac{40}{5}$$

Step 3: Subtract

$$\frac{40}{5} - \frac{8}{5} = \frac{32}{5}$$

Step 4: Convert back to a mixed number

$$\frac{32}{5} = 6\frac{2}{5}$$

Answer: _____ $6\frac{2}{5}$

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?

Step 1: Divide to find remainder

$$257 \div 5 = 51 \text{ remainder } 2$$

Step 2: Interpret the remainder

There are 2 pens in the last box.

Step 3: Find how many more are needed

A full box holds 5 pens, therefore:

$$5 - 2 = 3$$

Answer: _____ **3 pens**

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?

Step 1: Understand the ratio

Lettuce : Pepper = 6 : 8

Step 2: Find how many groups of 6 lettuce

$180 \div 6 = 30$ groups

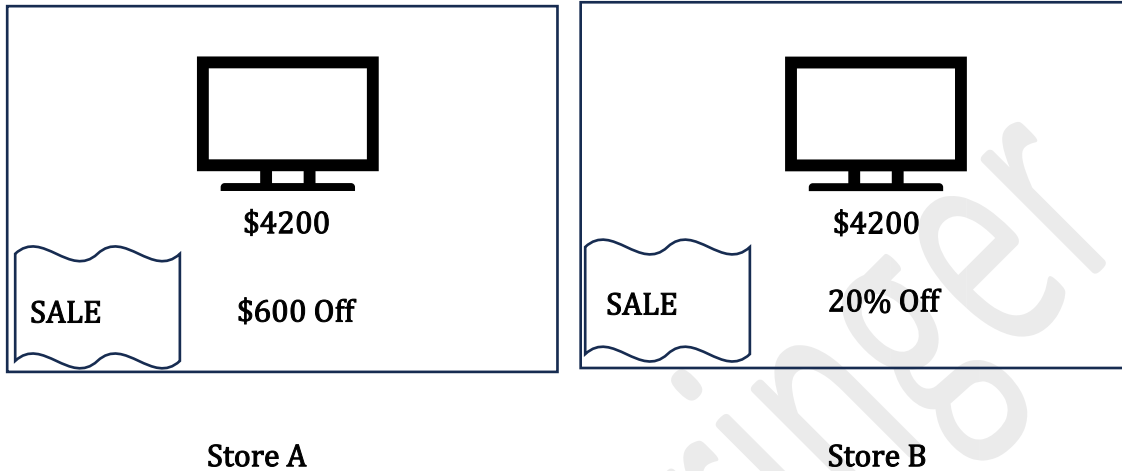
Step 3: Find number of pepper seedlings

For each group, there are 8 peppers:

$30 \times 8 = 240$

Answer: 240 pepper seedlings

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



Explain which store has the better offer.

Show all working.

Step 1: Store A discount

Original price = \$4200

Discount = \$600

New price at Store A:

(4200 – 600 = \$3600)

Step 2: Store B discount

20% of \$4200:

$$20\% = \frac{1}{5}$$

$$\frac{1}{5} \times 4200 = 840$$

New price at Store B:

$$(4200 - 840 = \$3360)$$

Step 3: Compare prices

Store A = \$3600

Store B = \$3360

Store B has the better offer because \$3360 is cheaper than \$3600.

Answer: _____ **Store B**

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?

Step 1: Find weekday earnings

Sam works 40 hours (Monday–Friday) at \$18 per hour:

$$40 \times 18 = 720$$

Step 2: Find how much he earned on Saturday

Total earnings = \$845

Saturday earnings:

$$845 - 720 = 125$$

Step 3: Find hours worked on Saturday

Rate on Saturday = \$25 per hour

$$125 \div 25 = 5$$

Answer: _____ **5 hours**

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?

Step 1: Let total audience = 1 whole ($\frac{8}{8}$)

$$\text{Adults} = \frac{3}{8}$$

$$\text{Children} = \frac{8}{8} - \frac{3}{8} = \frac{5}{8}$$

Step 2: Find the difference

Difference between children and adults:

$$\frac{5}{8} - \frac{3}{8} = \frac{2}{8} = \frac{1}{4}$$

$$\frac{1}{4} \text{ of the audience} = 600$$

Step 3: Find total audience

$$1 \text{ whole} = 600 \times 4 = 2400$$

Step 4: Find number of children

$$\begin{aligned}\text{Children} &= \frac{5}{8} \times 2400 \\ &= 1500\end{aligned}$$

Answer: _____ **1500 children** _____

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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 are 20 students who bought 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?

Students who bought less than 3 oranges = 20

2 oranges = $20 - 9 = 11$

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

Students who bought 5 oranges: 4

Students who bought 3 oranges: $4 \times 2 = 8$

Number of oranges	1	2	3	4	5
Number of students	9	11	8	3	4

Total students: $9 + 11 + 8 + 3 + 4 = 35$

Answer: _____ **35 students**

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28. The price of a jacket is \$80. The store is offering a 25% discount on all jackets.

Sonia says, "That means I will save \$25 on the jacket."

Explain why Sonia's statement is incorrect and determine the discounted price.

Show all working.

Step 1: Find 25% of \$80

$$25\% = \frac{25}{100}$$

$$\frac{25}{100} \times 80 = 20$$

The discount is \$20

Step 2: Explain Sonia's mistake

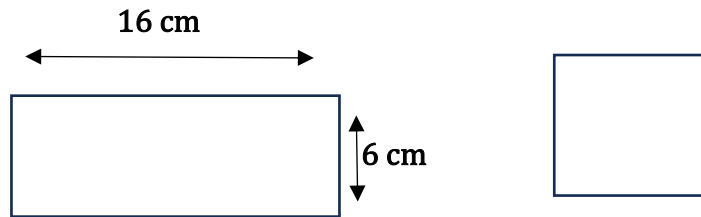
Sonia said she would save \$25, but:

- 25% does not mean \$25
- It means 25 out of every 100
- So, we must find 25% of \$80, which is \$20, not \$25

Answer: Sonia is incorrect because 25% of \$80 is \$20, not \$25.

The discounted price of the jacket is \$60.

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



Calculate the length of one side of the square.

Step 1: Find perimeter of rectangle

$$\begin{aligned}
 \text{Perimeter} &= 2 \times (\text{length} + \text{width}) \\
 &= 2 \times (16 + 6) \\
 &= 2 \times 22 \\
 &= 44 \text{ cm}
 \end{aligned}$$

$$\text{Perimeter of rectangle} = 44 \text{ cm}$$

Step 2: Square perimeter is the same

$$\text{Perimeter of square} = 44 \text{ cm}$$

A square has 4 equal sides.

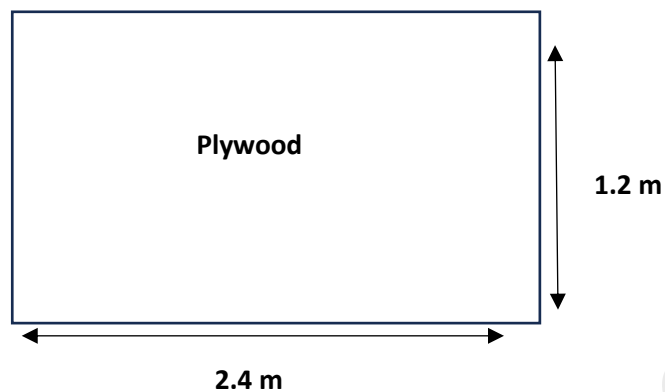
$$\text{Side length} = 44 \div 4$$

Step 3: Calculate side of square

$$44 \div 4 = 11$$

Answer: _____ **11 cm**

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.

Step 1: Find area of rectangle

$$\begin{aligned} \text{Area} &= \text{length} \times \text{width} \\ &= 2.4 \times 1.2 \\ &= 2.88 \text{ m}^2 \end{aligned}$$

Step 2: Find area of square cut out

$$\begin{aligned} \text{Area} &= \text{side} \times \text{side} \\ &= 1 \times 1 \\ &= 1 \text{ m}^2 \end{aligned}$$

Step 3: Find remaining area

Remaining area = area of rectangle – area of square

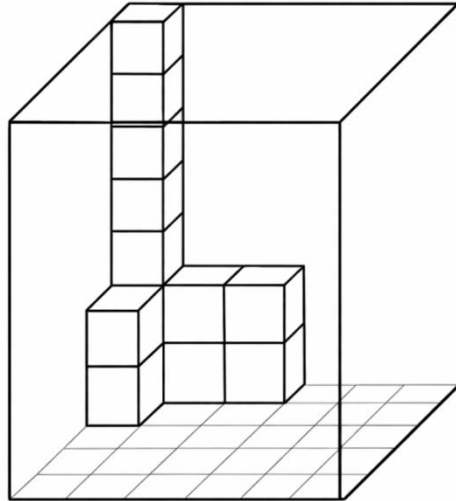
$$= 2.88 - 1$$

$$= 1.88 \text{ m}^2$$

Answer: _____ 1.88 m^2

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



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

From the grid and the corner stack:

Length: 6 cubes

Width: 5 cubes

Height: 7 cubes

When the box is at full capacity, it holds:

Volume of a cuboid = Length \times Width \times Height (using cubes)

$$= 6 \times 5 \times 7$$

$$= 210 \text{ cubes}$$

Now, we need to find out how many cubes are already in the box.

Looking carefully at the arrangement:

Vertical stack in the back corner: 7 cubes

Cubes on the bottom layer (forming the L-shape): 5 cubes

Cubes on the second layer (on top of part of that L): 1 cube

Total already inside:

$$7 + 5 + 1 = 13 \text{ cubes}$$

Cubes still needed

$$210 - 13 = 197$$

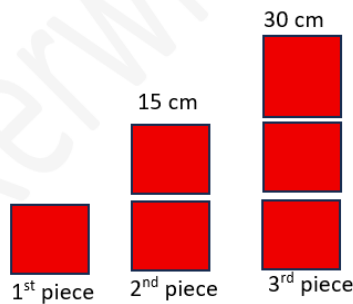
Answer: _____ **197 cubes**

32. A ribbon with a length of 1m 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?

Step 1: Recognize the total

Total: 1m and 13 cm = 113 cm

Step 2: Remove the excess



$$\begin{aligned} \text{Excess} &= 30 + 15 \\ &= 45 \text{ cm} \end{aligned}$$

Subtracting the excess from the total:

$$\begin{aligned} &\text{Total} - \text{Excess} \\ &= 113 - 45 \\ &= 68 \end{aligned}$$

Step 3: Count number of blocks

There are 4 blocks

This means that 4 blocks = 68

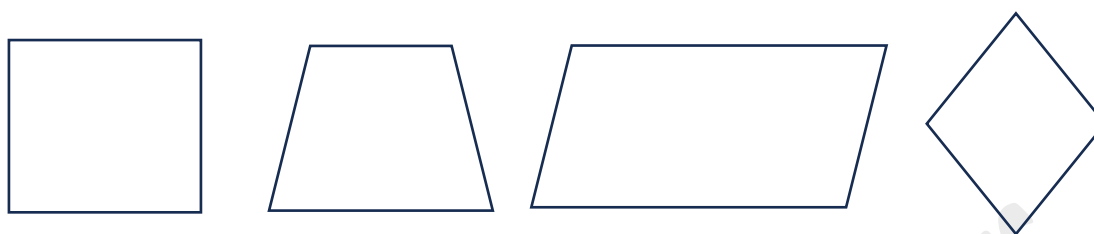
Step 4: Divide by shares

$$68 \div 4 = 17$$

1 block = 17 cm (first piece)

Answer: _____ 17 cm

33. Four quadrilaterals are shown below.

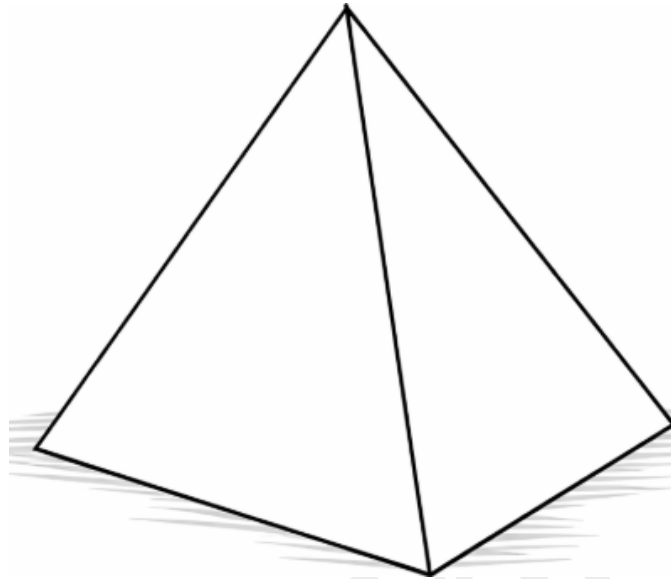


Write the names of the quadrilaterals that match the properties given.

Name of quadrilateral	Lines of symmetry	Right angles
_____	2	0
_____	4	4

Name of quadrilateral	Lines of symmetry	Right angles
Rhombus	2	0
Square	4	4

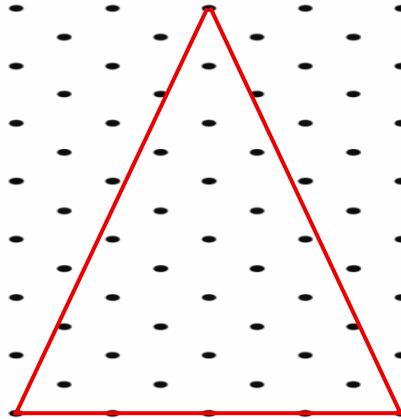
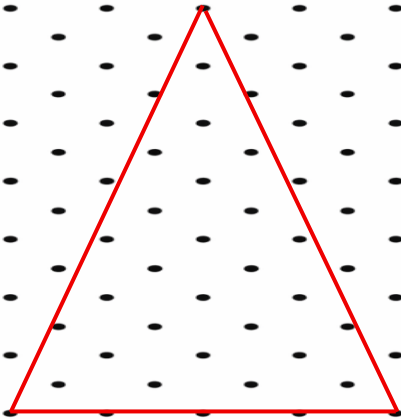
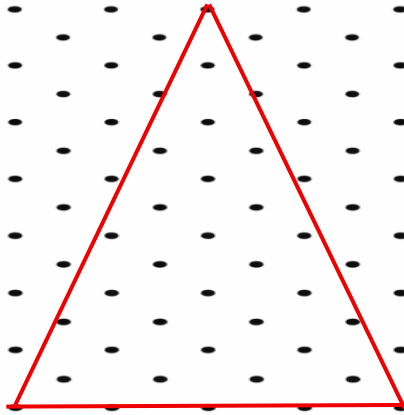
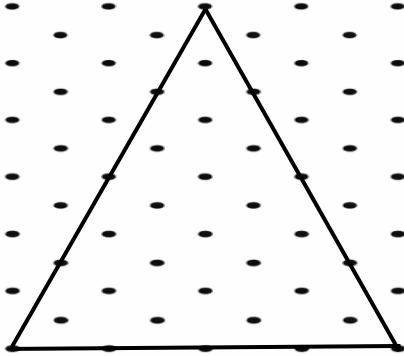
34. A triangular-based pyramid is shown below.



The base of the pyramid is an equilateral triangle as shown on the grid below.
Draw all the remaining faces on the grid.

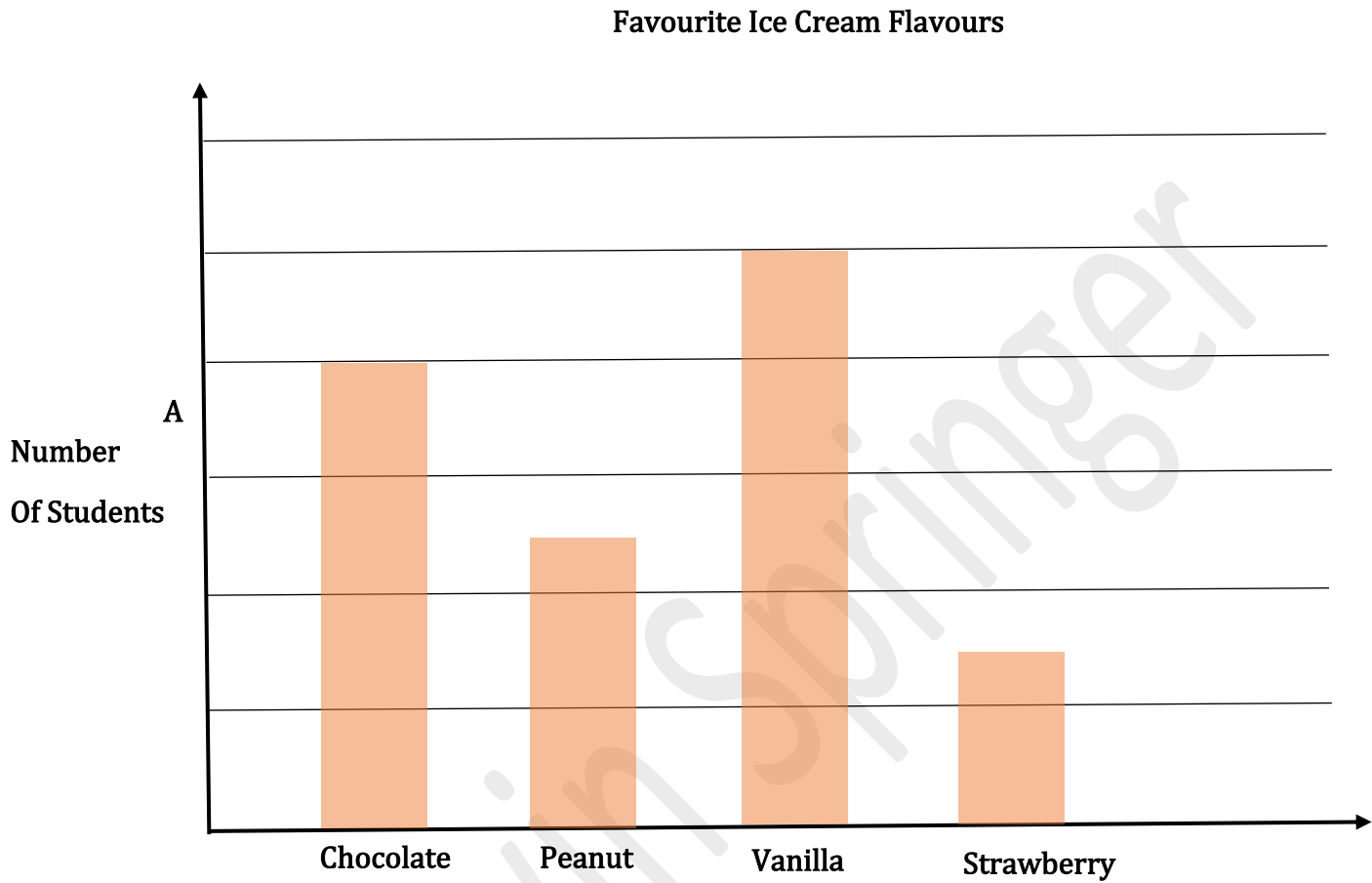
The triangular faces must be:

- Isosceles
- 1 matching base line
- Identical



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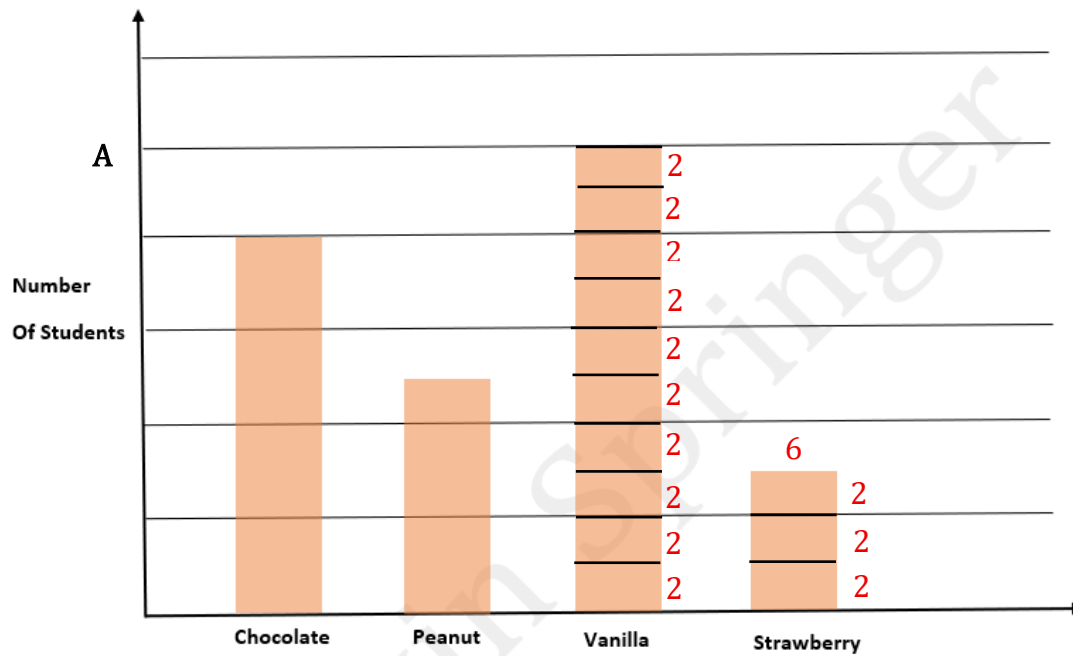
35. The bar graph below shows students' favourite ice cream flavours.



Strawberry is the favourite ice cream flavour of 6 students.

What number is represented by A?

Favourite Ice Cream Flavours



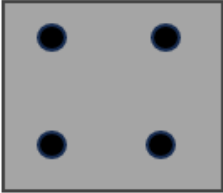
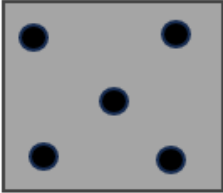
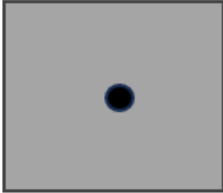

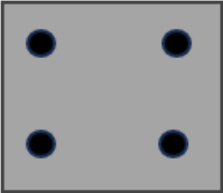
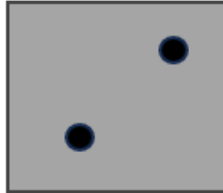
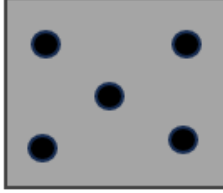
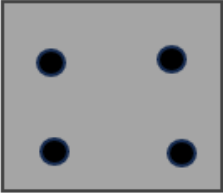
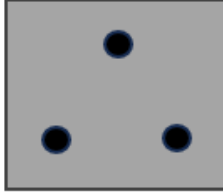
If we look closely at the bar for Strawberry, we will see that the number it represents (6) can be split into 3 equal parts: giving each part 2 units.

Let us use the 2 units each to find the number A represents (Vanilla)

$$2 \times 10 \text{ parts} = 20$$

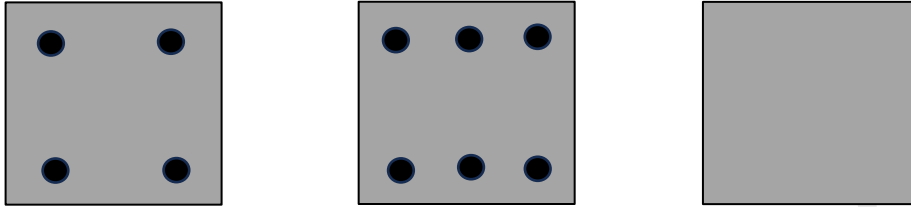
Answer: _____ 20 _____

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

Girl	1 st Throw	2 nd Throw	3 rd 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.



Mean = Total \div Number of numbers

Mean = 11 after Ria rolled her dice therefore Total = Mean \times Number of persons

$$= 11 \times 4$$

$$= 44$$

So far, our total is 30 (Sue = 10, Mia = 8 and Jess = 12)

$$\text{Ria} = 44 - 30$$

$$= 14$$

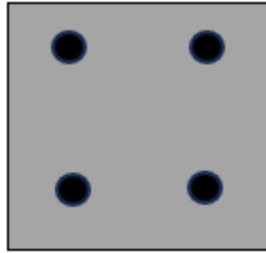
So far, Ria's dot count is 10

$$3^{\text{rd}} \text{ dot} = 14 - 10$$

$$= 4 \text{ dots}$$

Answer:

Ria's third dice



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

Anil's Score Card in the 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.

Anil's Score Card in the Game

Card	Card point	No. of picks	Total points
Ace	30	2	60
King	20	2	40
Queen	10	5	50
Jack	5	1	5
Total		12	155

OR

Card	Card point	No. of picks	Total points
Ace	30	2	60
King	20	2	40
Queen	10	3	30
Jack	5	5	25
Total		12	155

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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?

Step 1: Find maximum points he can earn

Maximum time = 5 minutes = 300 seconds

He earns 1 point every 15 seconds:

$$\begin{aligned}\text{Points} &= 300 \div 15 \\ &= 20 \text{ points}\end{aligned}$$

Step 2: Find maximum number of prizes

He gets 1 prize for every 6 points:

$$20 \div 6 = 3 \text{ remainder } 2$$

Maximum prizes = 3 prizes

(He needs $6 \times 3 = 18$ points)

Step 3: Find least time to get 18 points

Each point takes 15 seconds:

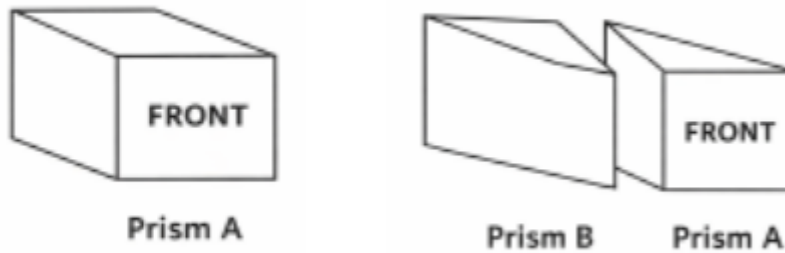
$$\begin{aligned}\text{Time} &= 18 \times 15 \\ &= 270 \text{ seconds}\end{aligned}$$

Convert to minutes:

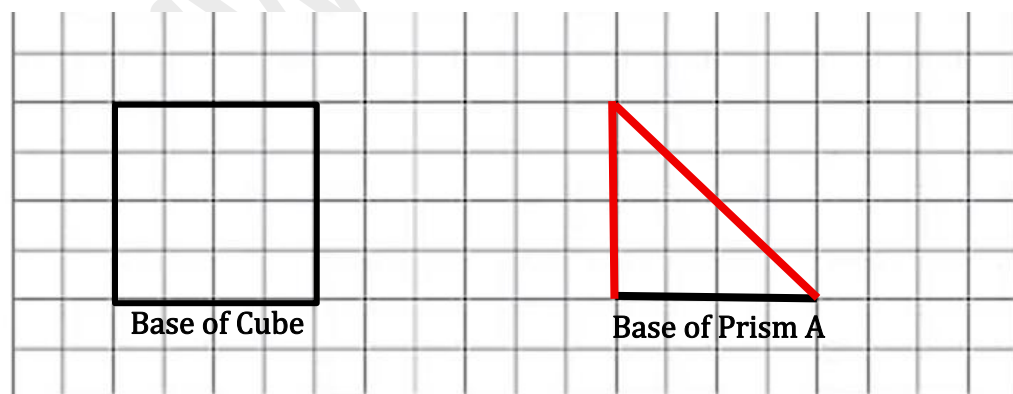
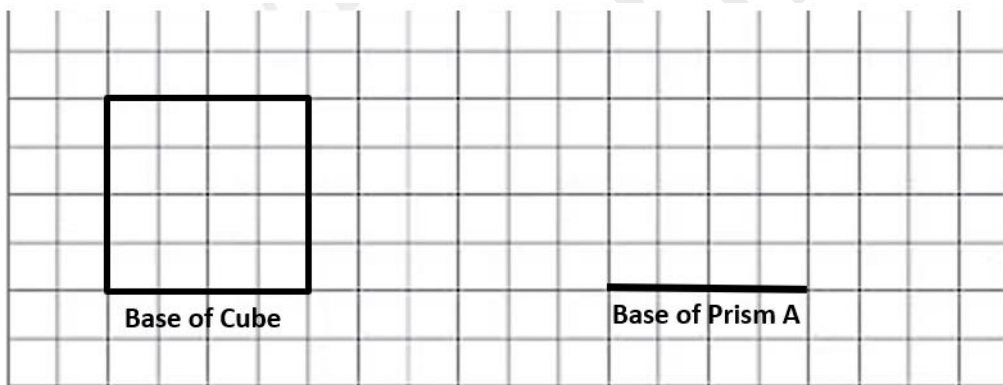
$$270 \text{ seconds} = 4 \text{ minutes } 30 \text{ seconds}$$

Answer: 4 minutes, 30 seconds

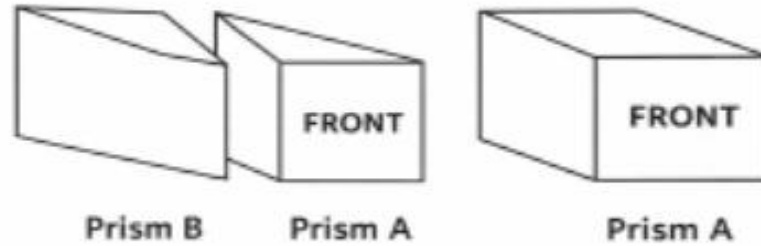
39. A cube is cut into halves to create two identical prisms as shown below.



(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.



(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.






State two similarities between the cube and the new prism.

Answer: (choose any two)

- They both have the same volume
- The cube and the new prism have the same base area
- They both have the same cross-section

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

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.

Find the difference between the number of children who liked Bananas and Oranges then equate it to 55 (55 more children liked bananas than oranges)

$$6\frac{1}{2} - 1 = 5\frac{1}{2}$$

$$5\frac{1}{2} = 55$$

1 smiley face =

$$55 \div 5.5 = 10$$

The number of children who liked apples was



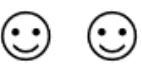
- Greater than 40
- A factor of 180 and a multiple of 9
- The second largest number

The number which suits the criteria is 45

How many smiley faces would represent 45? (remember each face represents 10)

$$45 \div 10 = 4 \frac{1}{2}$$

Answer:

Apples	
Bananas	
Grapes	
Oranges	