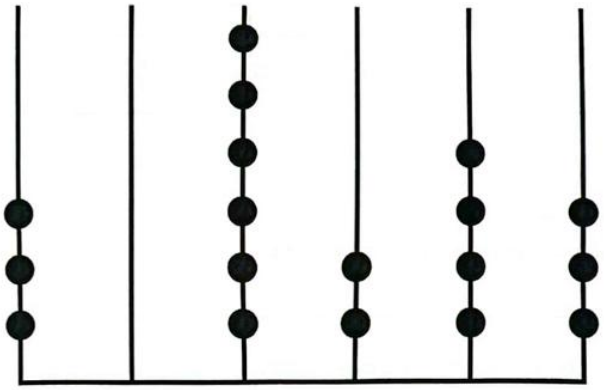
Date: 08/05/2025

Topic: SEA Exam

Title: SEA Maths Exam 2025

SECTION I

1. Write the numeral represented below.



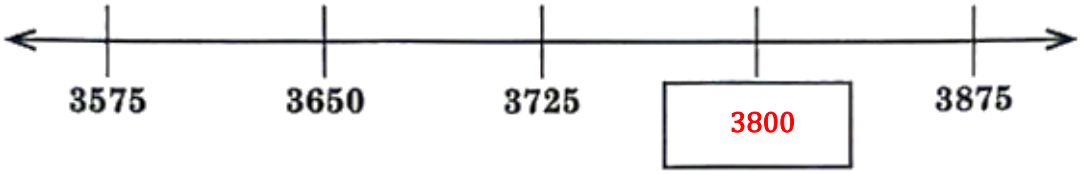
3 0 6 2 4 3

Answer _____306243_____

2. Circle the largest number below

101 011 101 110 101 010 101 101

3. A number line is shown below.



Insert the missing number in the box.

4. Complete the number sentence below

$$20 \times \boxed{3 + 4} = 20 \times 3 + 20 \times 4$$

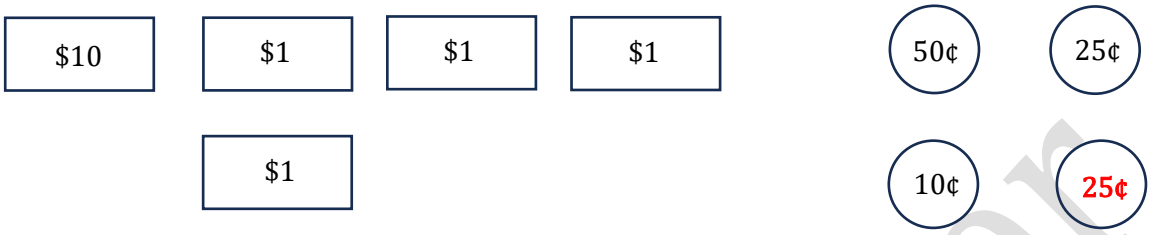
NB: The answer could be given as 7 as well

5. Calculate 25×48

	×	4	8
1	0	0	0
+	2	0	0
1	2	0	0

Answer _____1200_____

6. Ziyad has a total of $15.10 in bills and coins. The value of one of the coins is not shown.



What is the value of the coin not shown?

Total bills $= 10 + 1 + 1 + 1 + 1$

$= \$14$

Total coins $= 50 + 25 + 10$

$= 85$ cents

$$\begin{array}{rrr} & 5 & 0 \\ & 2 & 5 \\ + & 1 & 0 \\ \hline & 8 & 5 \end{array}$$

Missing coin $= \$15.10 - \$14.85$

$$\begin{array}{rrrrr} & 1 & 5 & 1 & 0 \\ - & 1 & 4 & 8 & 5 \\ \hline & & & 2 & 5 \end{array}$$

Answer _____25 cents_____

7. What number must be placed in the box to make the number statement true?

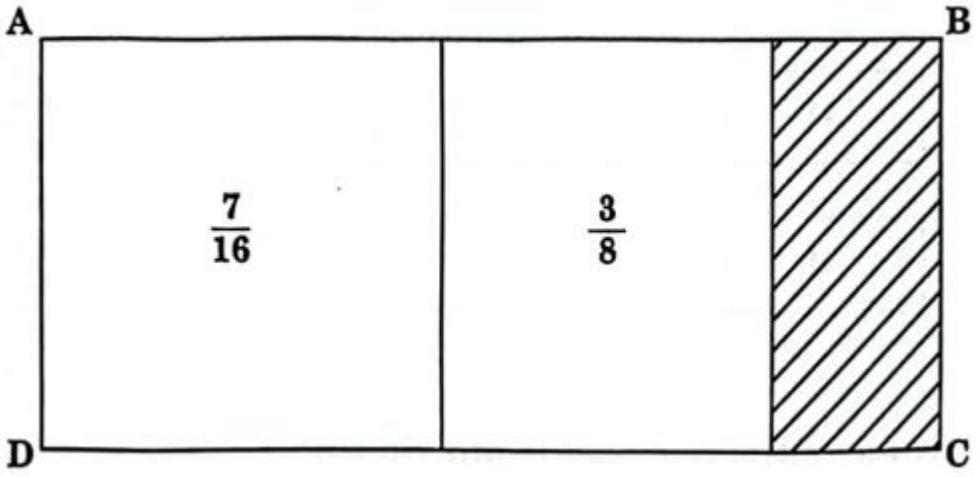
$\div 9$

$$\frac{27}{45} = \frac{3}{\square}$$

$\div 9$

Answer _____5_____

8. Rectangle ABCD below represents a whole.



What fraction of the rectangle is shaded?

Write $\frac{3}{8}$ as an equivalent fraction: $\frac{6}{16}$

$$\text{Total Unshaded Area} = \frac{7}{16} + \frac{6}{16}$$

$$= \frac{13}{16}$$

$$\text{Shaded Area} = 1 - \frac{13}{16}$$

$$= \frac{16}{16} - \frac{13}{16}$$

$$= \frac{3}{16}$$

Answer _____$\frac{3}{16}$_____

9. Jose bought 340 seedlings. He planted 45% of the seedlings.

How many seedlings did Jose plant?

$$45\%\ of\ 340 = \frac{45}{100} \times \frac{340}{1}$$

$$= \frac{\overset{9}{\cancel{45}}}{\underset{2}{\cancel{100}}} \times \frac{\overset{17}{\cancel{340}}}{1}$$

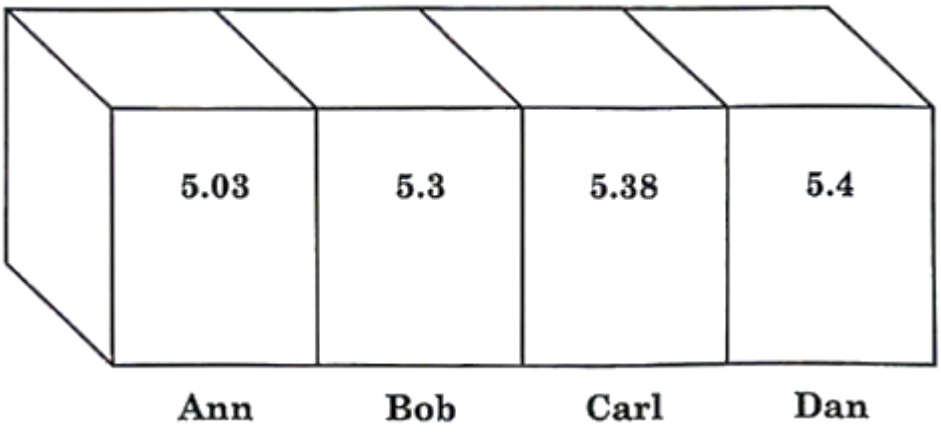
$$= 9 \times 17$$

$$= 153$$

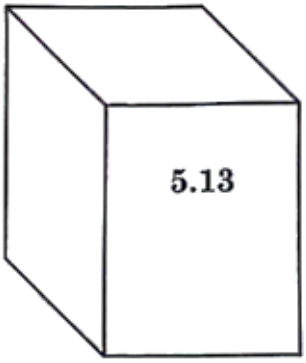
Answer _____153_____ seedlings

10. Some students are ordering numbered blocks.

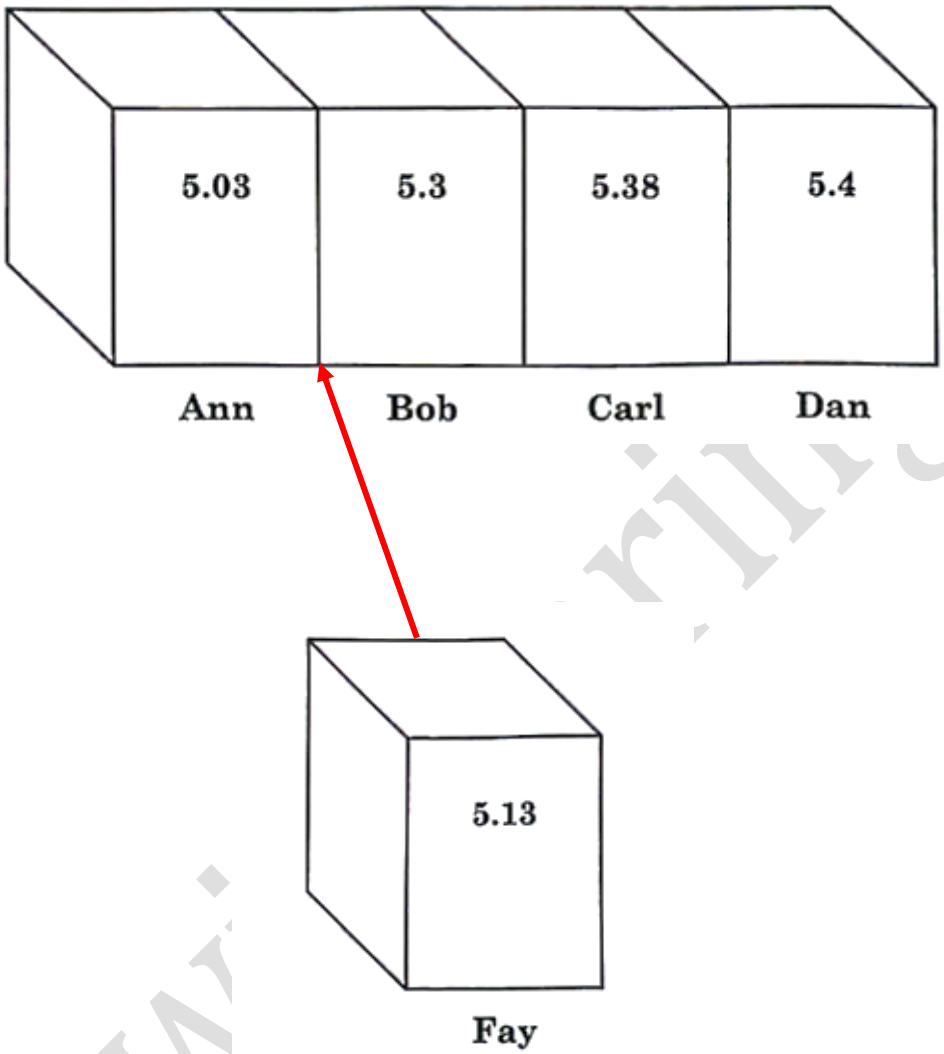
The diagram below shows how 4 students ordered their blocks.



Fay chooses the block shown below.



Between which two students' blocks should Fay place her block?



Answer _____Ann_____and_____Bob_____

11. The calendar below represents the month of June.

JUNE						
Sun	Mon	Tues	Wed	Thurs	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

Jade visited the dentist on the 8th June and has to return exactly 2 weeks later.

On what day did Jade return?

1 Week = 7 days

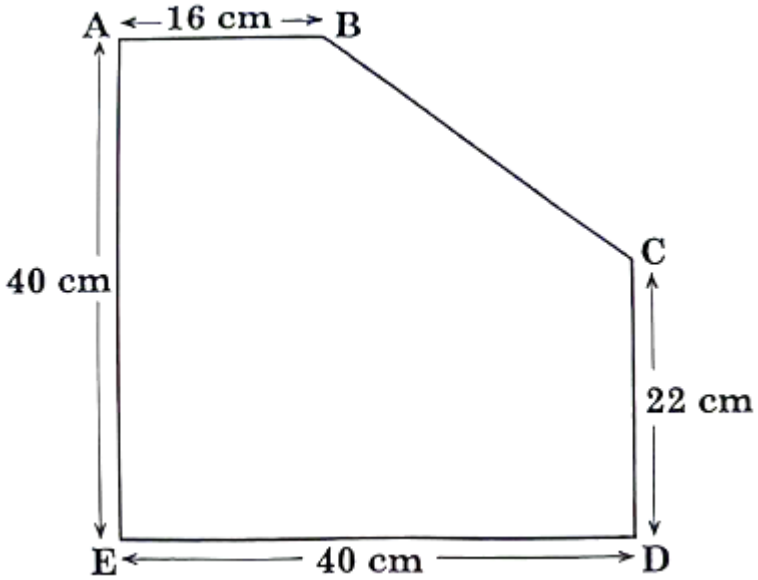
2 Weeks = 14 days

Return date = 8 + 14

= 22

Answer _____22nd_____ June

12. The perimeter of the pentagon ABCDE, shown below is 148 cm.



What is the length of BC?

Length of BC = Perimeter – (AB + CD + DE +EA)

= 148 – (16 + 22 + 40 + 40)

= 148 – 118

= 30 cm

$$\begin{array}{rrr} & 1 & 6 \\ & 2 & 2 \\ + & 4 & 0 \\ & 4 & 0 \\ \hline 1 & 1 & 8 \end{array}$$

Answer _____30_____cm

13. The Diagram below shows a fish on a scale.

State the mass of the fish.

Answer _____1.5_____kg

14. Paul pours 3 litres of water into a number of 250 ml cups.

3 litres

250 ml

How many cups can be filled completely?

250 ml $= \frac{1}{4}$ Litre

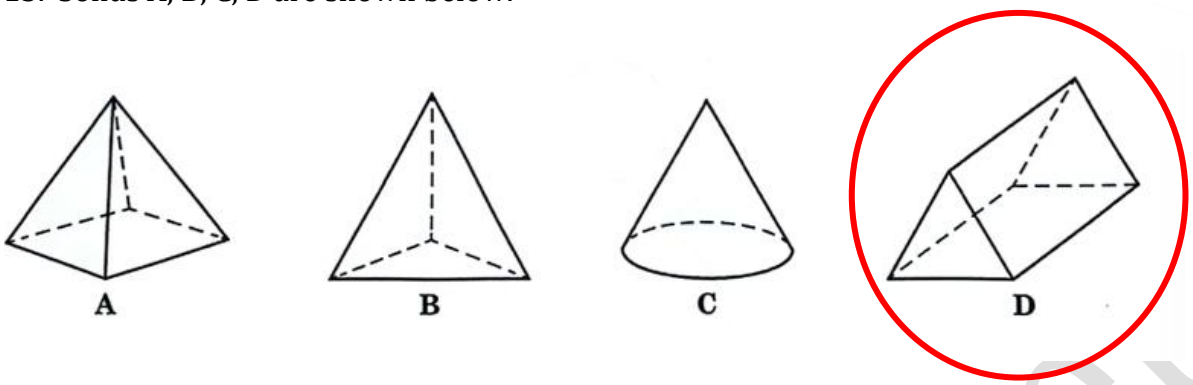
Hence, 4 cups = 1 Litre

Therefore, 3 Litres = 3×4 cups

= 12 cups

Answer _____12_____ cups

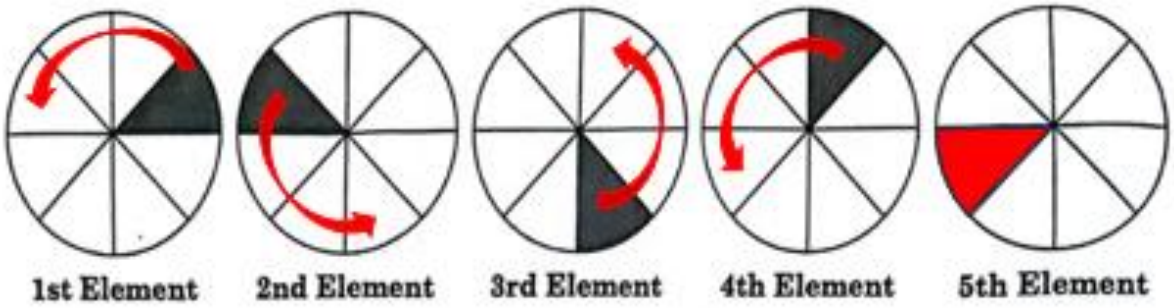
15. Solids A, B, C, D are shown below.



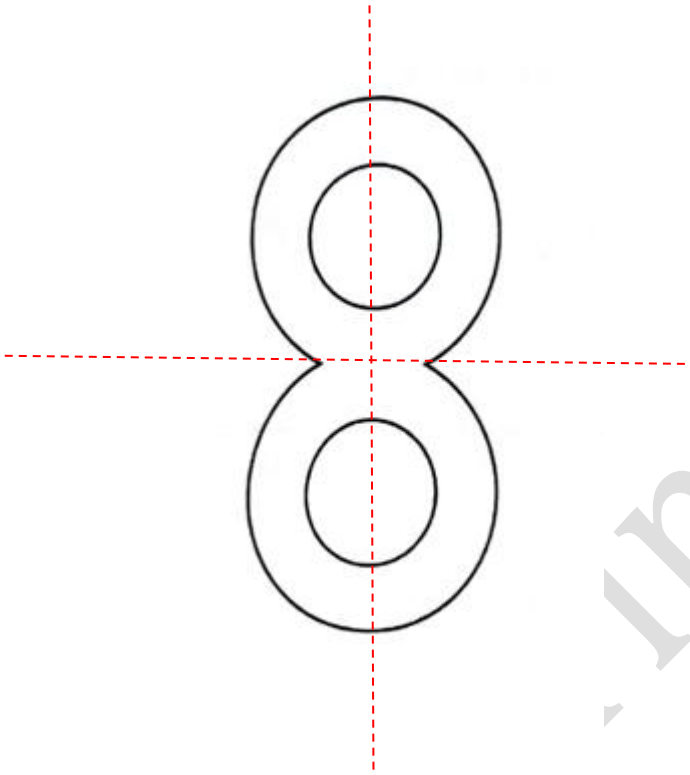
Which solid has a uniform cross-section in the shape of a triangle?

Answer _____D_____

16. The first elements of a pattern are shown below. Complete the 5th element.



17. Draw all the lines of symmetry on the figure below.



18. Students' scores on a quiz are shown below.

4, 3, 2, 5, 1, 0, 3, 2, 3, 1

What is the modal score?

Answer _____3_____

19. The mean of a set of numbers is 22.

The sum of the set of numbers is 132.

How many numbers are there in the set?

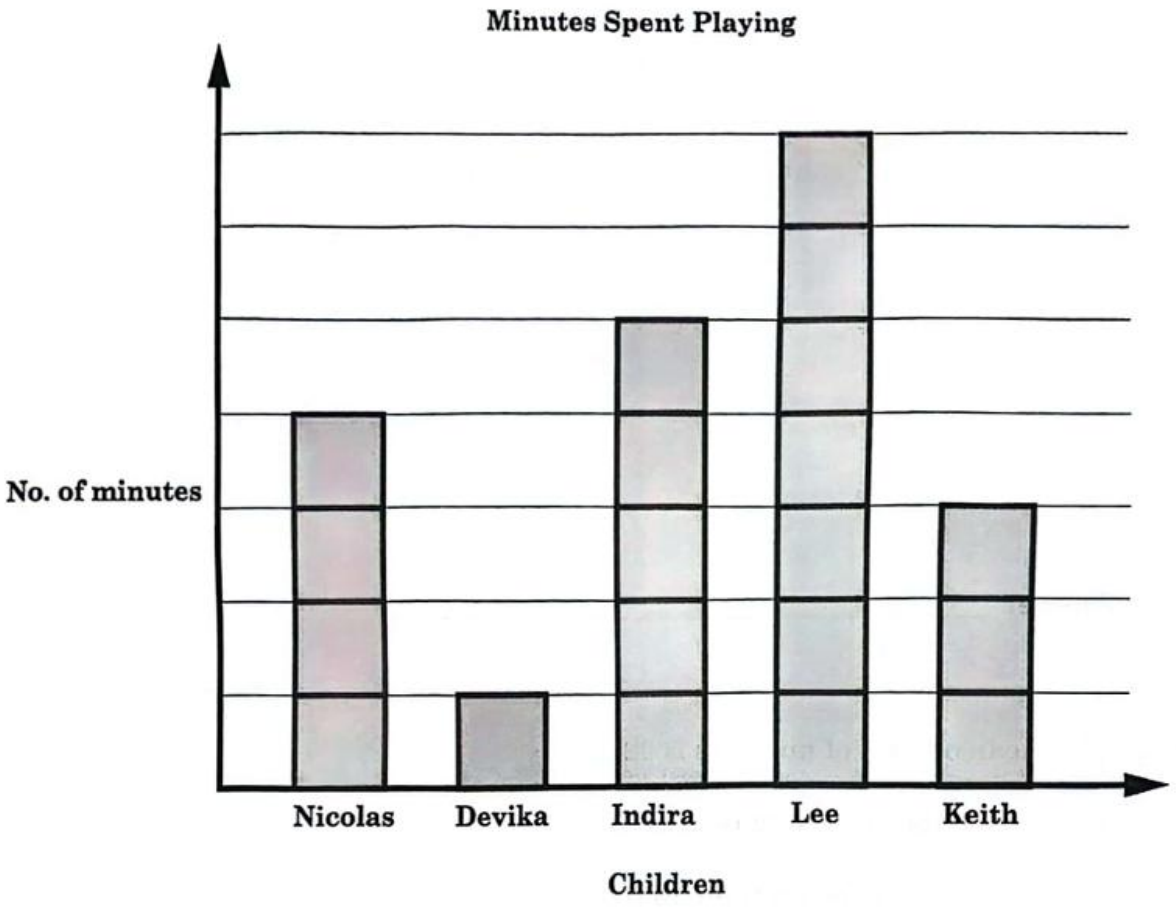
$$\text{Numbers in the set} = \frac{Sum\ of\ the\ Set\ of\ Numbers}{Mean\ of\ the\ Set\ of\ Numbers}$$

$$= \frac{132}{22}$$

$$= 6$$

Answer _____6_____ numbers

20. The block graph below shows the number of minutes 5 children spent playing.



The children spent a total of 100 minutes playing.

How many minutes did Keith spend playing?

If the total number of blocks on the bar graph is 20.

Then, each block represents $= \frac{Total\ number\ of\ minutes}{Total\ number\ of\ blocks}$

$= 5$ minutes

Keith has 3 blocks.

Therefore, Keith's time $= 3 \times 5$

$= 15$ minutes

Answer _____15_____minutes

21. The price of a smartphone is \$1200 plus VAT of $12\frac{1}{2}\%$.
What is the final price of the smartphone?

VAT $= 12\frac{1}{2}\%$ of \$1200

$= \frac{12.5}{\cancel{100}} \times \frac{\cancel{1200}}{1}$

$= 12.5 \times 12$

$=$ \$150

Final Price $=$ \$1200 + \$150

$=$ \$1350

Answer \$_____1350_____

22. A list of ingredients for 10 cookies is shown below.

Ingredients:

100g	butter
100g	sugar
30g	chocolate
180g	flour
25g	cereal

Kamini wants to make 12 cookies. How much flour would she need?

10 cookies = 180g Flour

1 cookie = $\frac{180}{10}$

= 18g

Flour needed for 12 cookies = 12 × 18

= 216g

Answer _____216_____g

23. Complete the shopping bill shown below.

Shopping Bill

Item	Unit Cost	Quantity	Total
Cupcake	$5.00	2	$10.00
Currant roll	$9.00	3	$27.00
Doughnut	$ _____	6	$ _____
Total			**$79.00**

Doughnut Total = Total – Cupcake Total + Currant Roll Total.

$= 79 - (10 + 27)$

$= 79 - 37$

$= 42$

Doughnut Unit Cost $= \frac{Doughnut\ Total}{Quantity}$

$= \frac{42}{6}$

$= \$7$

24. The table below shows the cost of printing postcards at a printery.

No. of Postcards	Cost
First 200	$160.00
Every additional set of 5	$3.00

Gale printed 700 postcards. How much did she pay?

Cost of first 200 = $160

Remaining postcards = 700 − 200

= 500 postcards

Number of sets (of 5) = 500 ÷ 5

= 100 sets of 5

Cost for sets = 100 × $3

= $300

Therefore, total cost = $160 + $300

= $460

Answer $_____460_____

25. Nick has 4 boxes of balloons. Each box contains 108 balloons. Nick packs the balloons into party bags. He packs 14 balloons into each party bag.

How many **more** ballons would he need to fill the last party bag?

Total number of balloons $= 108 \times 4$

$= 432$ balloons

$$\begin{array}{r} 1\ 0\ 8 \\ \times\quad 4 \\ \hline 4\ 3\ 2 \end{array}$$

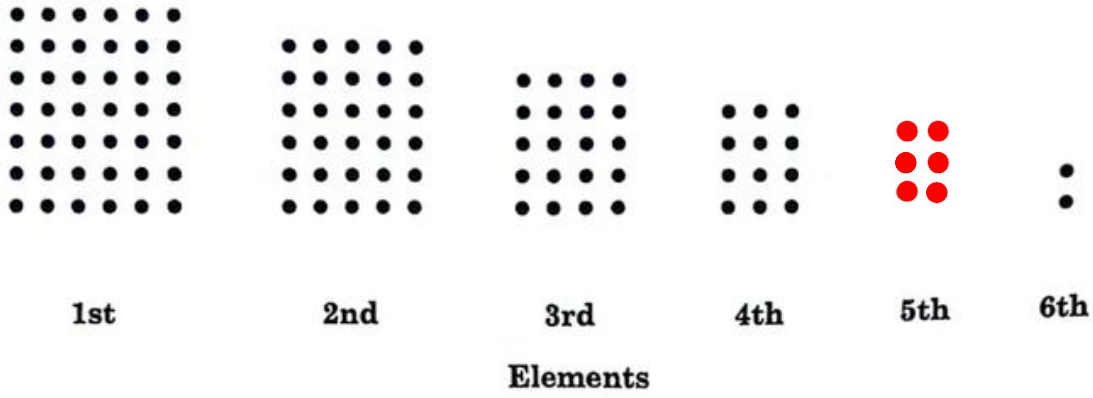
Balloons per bag $= 432 \div 14$

$= 30$ remainder 12

Since 12 balloons remain, we need 2 more ballons to make a bag of 14.

Answer _____2_____ balloons

26. A number pattern is shown below. The 5th element is not shown.



Draw the 5th element and describe the pattern.

Answer:

The pattern started with an element 7 rows and 6 colums of dots. With every new element, the column on the left and the top row are removed from the previous element (to form the new one). The pattern continued until there was only one column remaining.

27. The cost of 1 table and 4 chairs is $280.00.
The cost of 1 table is 3 times the cost of 1 chair.
Calculate the cost of 1 table.

$1T + 4C = 280$

If the cost of 1 table equals the cost of 3 chairs, then $1T = 3C$

Therefore,

$3C + 4C = 280$

$7C = 280$

$C = 40$

The cost of 1 Table = 3C

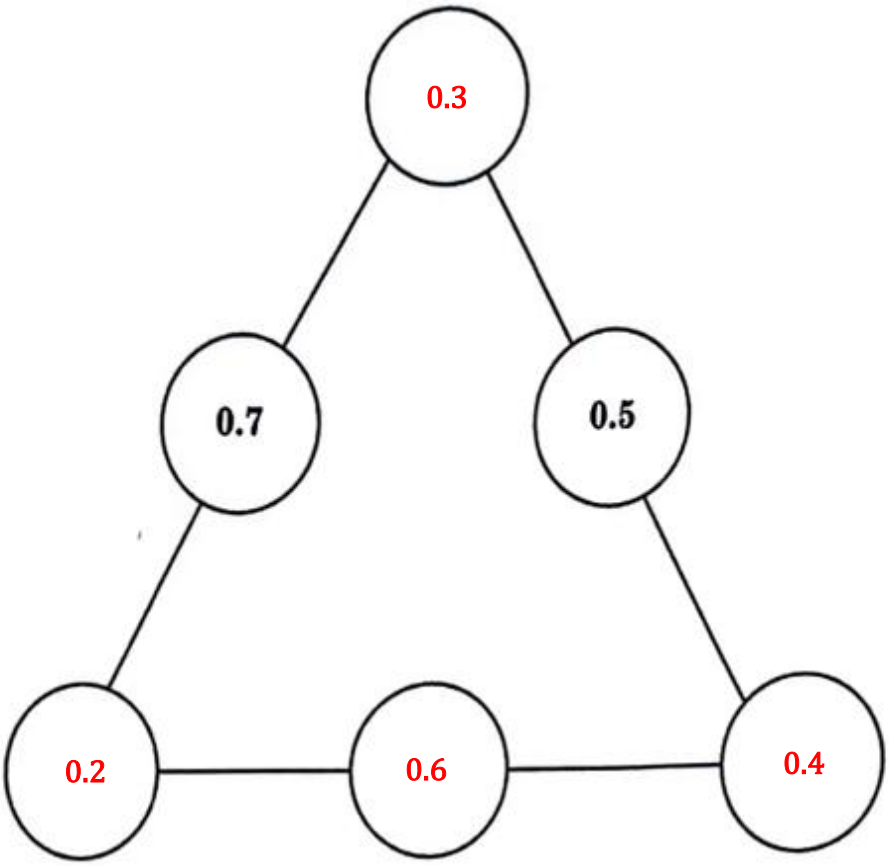
= 3 × 40

= $120

Answer $_____120_____

28. The diagram is a triangle. On each side of the triangle there are 3 circles.

The sum of the numbers on each side is 1.2.

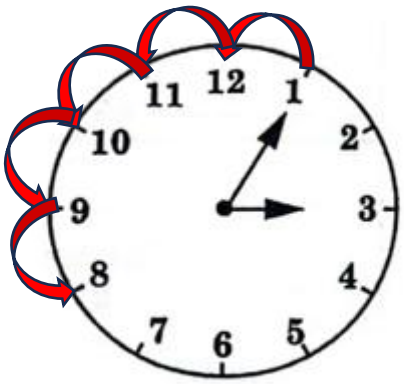


Use the decimals below to complete the triangle.

0.2 0.3 0.4 0.6

29. The clock below shows the time Aliya arrived at the mall.

Her journey from home to the mall took 25 minutes.

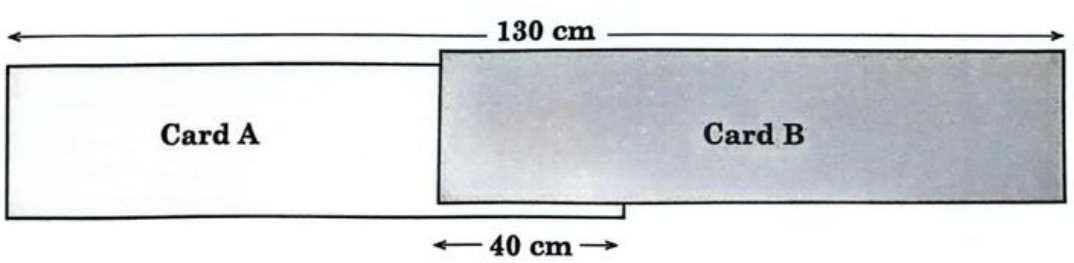


At what time did Aliya leave home?

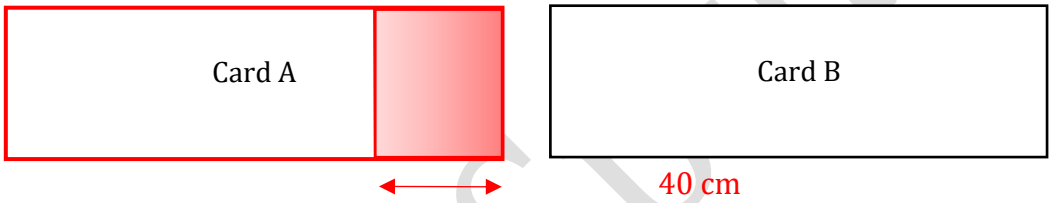
Answer _____2:40_____

30. Two identical pieces of cardboard were stuck together as shown below.

The length of the overlapping portion is 40 cm.



What was the length of each piece of cardboard before they were stuck together?



If Card B overlaps unto Card A then in the diagram the entire length of Card B is shown but 40 cm of Card A is hidden.

Therefore, total length of both cards = 130 + 40

= 170

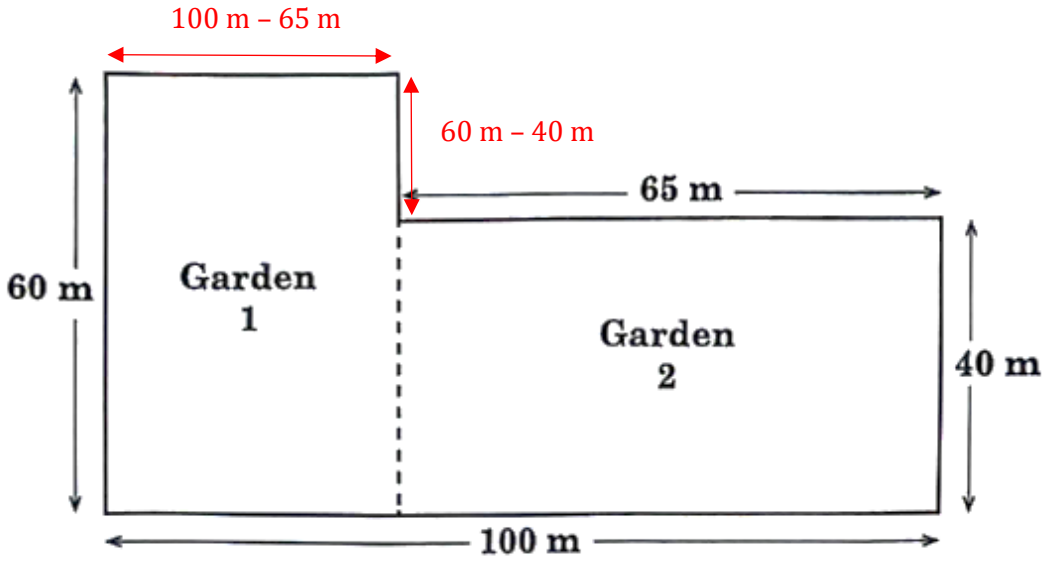
If both cards are identical then they have the same length

Length of each card = 170 ÷ 2

= 85 cm

Answer _____85_____cm

31. Mr. Dawson's land is divided into 2 rectangular gardens as shown below.



Mr. Dawson wants to build a fence around his entire land and between Garden 1 and Garden 2.

How many metres of fence will he need?

Outside Perimeter = 35 + 20 + 65 + 40 + 100 + 60

= 320 m

Fence between Garden 1 and 2 = 40 m

Therefore Total = 320 + 40

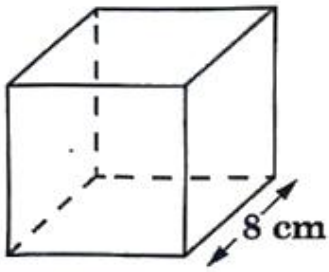
= 360 m

$$\begin{array}{rrrr} & & 3 & 5 \\ & & 2 & 0 \\ & & 6 & 5 \\ & & 4 & 0 \\ & 1 & 0 & 0 \\ + & & 6 & 0 \\ \hline & 3 & 2 & 0 \end{array}$$

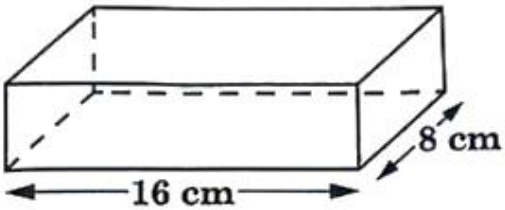
Answer _____360_____m

32. Two containers, A and B, are shown below.

Container A is a cube and Container B is a cuboid.



A



B

Container A is completely filled with water and Container B is empty.

The water from Container A is poured into Container B.

What is the height of the water in Container B?

Volume of A $= 8 \times 8 \times 8$

$= 64 \times 8$

Volume of B $= L \times W \times H$

$= 16 \times 8 \times H$

$H = \frac{\text{Volume of B}}{16 \times 8}$

Remember Volume A = Volume of B

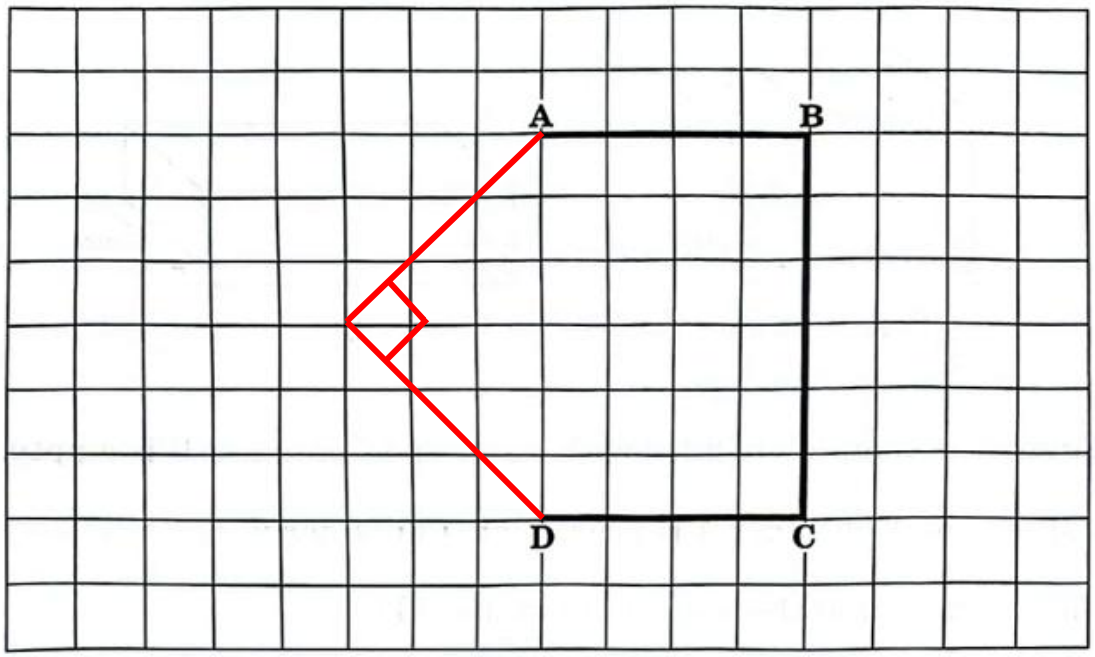
$H = \frac{\text{Volume of A}}{16 \times 8}$

$H = \frac{64 \times 8}{16 \times 8}$

$= 4$ cm

Answer _____4_____cm

33. An incomplete five-sided shape, ABCDE is shown on the grid below.



Three sides of the shape are shown. The completed shape must have 3 right angles.

Complete the shape.

34. State one similarity and one difference between a square and a rhombus.

Similarity	Difference
Both shapes have four equal sides	In a square, all angels are 90^0. However, in a rhombus, the opposite angles are equal

35. The pictograph below represents storybooks owned by 3 students.

Storybooks Owned by Three Students

Amani	
Zarah	
Ibby	

Amani owns 15 more books than Zarah.

How many books does Ibby own?

Difference between Amani and Zarah = 3 images

3 images = 15 books

1 image = 5 books

Therefore, since Ibby has 6 images

Number of books Ibby owns = 6×5

= 30 books

Answer _____30_____ books

36. Asha's mean score on 2 tests was 54. Her score on the first test was 12 less than her score on the second test. What was her score on the first test?

Total for 2 tests $= 54 \times 2$

$= 108$

$+12$

T1	T2

Remove excess $= 108 - 12$

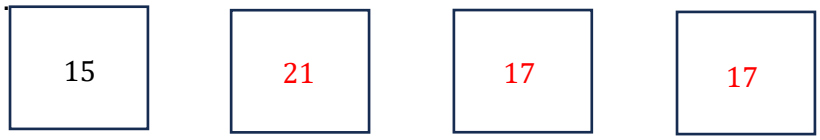
$= 96$

1 part $= 96 \div 2$

$= 48$

Answer _____48_____

37. Four number cards are shown below. Three numbers are missing.



Two of the cards have the same number.

Only one number is 6 less than another.

All missing numbers are greater than 15.

The total of the four numbers is 70.

Determine the missing numbers.

If all the numbers are greater than 15 and one is greater than 6

Then let one of the numbers be 6 more than 15

One missing card $= 15 + 6$

$= 21$

The total so far $= 15 + 21$

$= 36$

Since two cards are equal and the total of all the cards is 70.

Total of the last 2 missing cards $= 70 - 36$

$= 34$

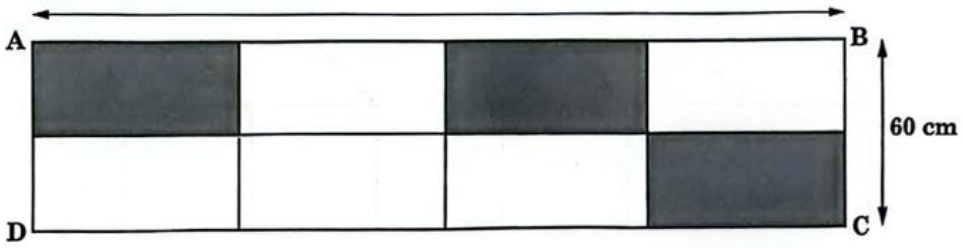
Each of the last 2 missing numbers $= 34 \div 2$

$= 17$

Answer _____17_____, _____17_____, _____21_____

38. The rectangle, ABCD, shown below is divided into smaller identical rectangles.

The area of the shaded portion is 3 600 cm^2.



Calculate the length of AB, in metres.

Area of 3 ▭ is 3600.

Therefore, area of one ▭ $= 3600 \div 3$

$= 1200$

Since all the rectangles are equal then the line BC is made up of 2 widths of the rectangles.

Therefore, the width of one rectangle $= 60 \div 2$

$= 30$

Area $= L \times W$

$L = \frac{Area}{30}$

$= \frac{1200}{30}$

$= 40$ cm

AB = 4 lengths

$= 4 \times 40$

$= 160$ cm

1 m = 100 cm

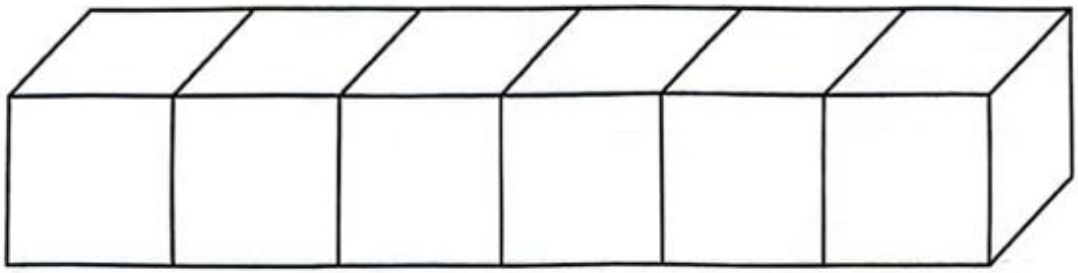
Therefore, 160 cm $= 160 \div 100$

$= 160$ m

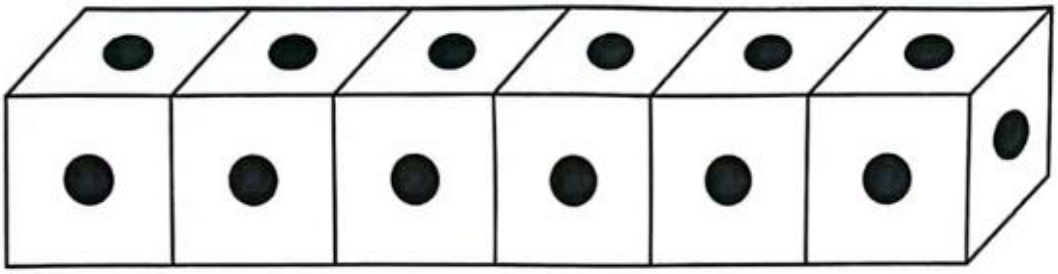
$= 1.6$ m

Answer _____1.6_____m

39. Fidel had 6 cubes. He placed them side by side and stuck them together as shown below.



Fidel placed 1 black dot on each face that is not stuck together.



(a) What was the total number of dots placed on the 6 cubes?

Every cube has 6 faces.

The two end pieces will have 5 faces exposed since one of their faces is stuck

The four middle pieces will have 4 faces exposed since two of their faces are stuck.

Total dots on two end pieces $= 2 \times 5$

$= 10$ dots

Total dots on four middle pieces $= 4 \times 4$

$= 16$ dots

Total dots for all $= 10 + 16$

$= 26$ dots

Answer _____26_____ dots

(b) What is the **greatest** number of cubes that can be stuck together so that the total number of dots is **less than 45?**

There will always be 2 ends with 5 dots each so first subtract that from the total:

$45 - 10 = 35$

Each middle cube has 4 dots.

Number of middle cubes possible $= 35 \div 4$

$= 8$ remainder 3

$= 8$ whole cubes

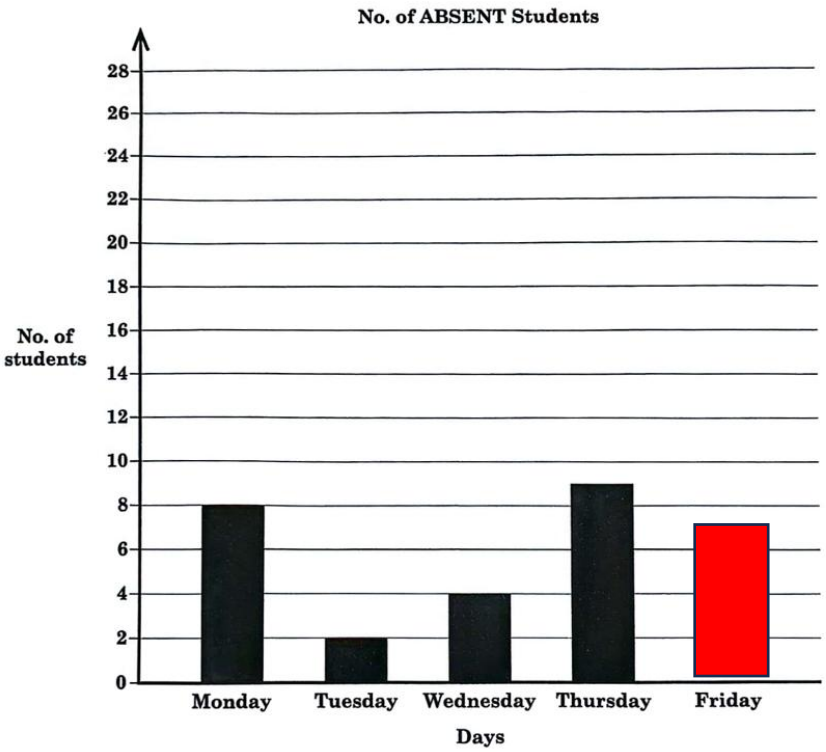
Therefore, Total number of cubes = end cubes + middle cubes

$= 2 + 8$

$= 10$

Answer _____10_____ cubes

40. There are 28 students in a class. The incomplete bar graph below shows the number of students who were absent for 5 days.



The mean number of students present for 5 days was 22. Complete the bar graph to show the number of students who were **absent** on Friday.

Mean of present students is 22.

Mean of absent students = 28 − 22 = 6

Total absent students (for the week) = 6 × 5

= 30

Absent so far (Monday – Thursday) = 8 + 2 + 4 + 9

= 23

Number of students absent on Friday = 30 – 23

= 7 students

Answer _____7_____ students