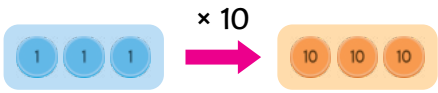
3 Four Operations of Whole Numbers



Multiplication by 2-Digit Number

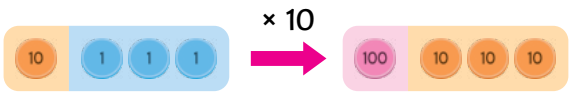
Let's Learn

1 **(a)** Find the product of 3 and 10.

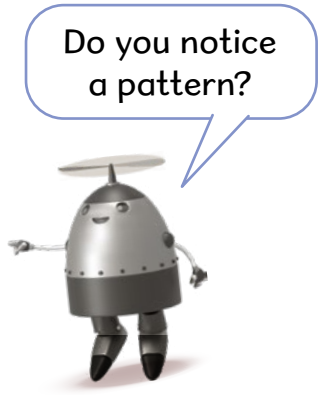


$3 \times 10 = 30$

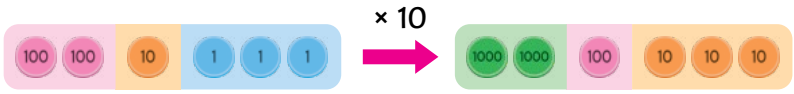
(b) Find the product of 13 and 10.



$13 \times 10 = 130$



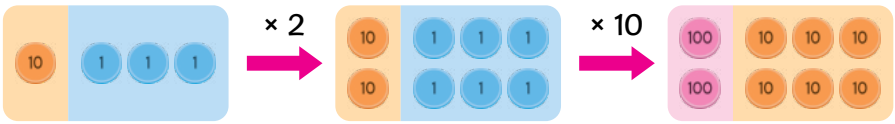
(c) Find the product of 213 and 10.



$213 \times 10 = 2130$

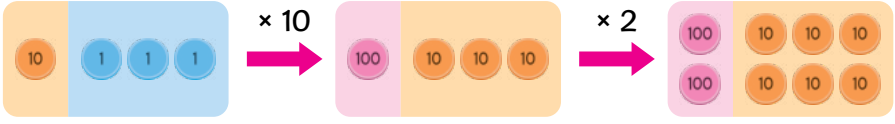
2 Find the product of 13 and 20.

Method 1



$13 \times 2 = 26$ $\quad 26 \times 10 = 260$

Method 2



$13 \times 10 = 130$ $\quad 130 \times 2 = 260$

13 × 20 = 260



3 Find the product of 12 and 40.

Method 1

$12 \times 40 = 12 \times 10 \times 4$
$= 120 \times 4$
$= 480$

Method 2

$12 \times 40 = 12 \times 4 \times 10$
$= 48 \times 10$
$= 480$

12 × 40 = 480

4 Multiply 47 by 12.

47 × 12 = ?

Step 1 Multiply the ones.

	H	T	O
		4	7
×		1	2
		9	4

← 47 × 2

Step 2 Multiply the tens.

	H	T	O
		4	7
×		1	2
		9	4
	4	7	0

← 47 × 10

Step 3 Add.

	H	T	O
		4	7
×		1	2
		9	4
+	4	7	0
	5	6	4

← 94 + 470

47 × 12 = 564

5 Find the product of 34 and 36.

$34 \times 36 = ?$

Step 1 Multiply the ones.

	Th	H	T	O
			3	4
×			3	6
		2	0	4

34 × 6

Step 2 Multiply the tens.

	Th	H	T	O
			3	4
×			3	6
		2	0	4
	1	0	2	0

34 × 30

Step 3 Add.

	Th	H	T	O
			3	4
×			3	6
		2	0	4
+	1	0	2	0
	1	2	2	4

204 + 1020

34 × 36 = 1224

34 × 36

30 × 40 = 1200

34 × 36 ≈ 1200





6 Find the product of 245 and 28.

$245 \times 28 = ?$

245 × 28

200 × 30 = 6000

245 × 28 ≈ 6000



Step 1 Multiply the ones.

	Th	H	T	O
		2	4	5
×			2	8
	1	9	6	0

← 245 × 8

Step 2 Multiply the tens.

	Th	H	T	O
		2	4	5
×			2	8
	1	9	6	0
	4	9	0	0

← 245 × 20

Step 3 Add.

	Th	H	T	O
		2	4	5
×			2	8
	1	9	6	0
+	4	9	0	0
	6	8	6	0

← 1960 + 4900

245 × 28 = 6860

Is the answer reasonable?



Let's Practise

Find the products.

(a) 14 and 20

(b) 15 and 62

(c) 309 and 10

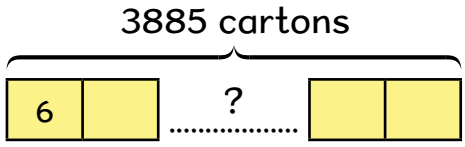
(d) 351 and 29

Go to PB 4A Practice 3

Word Problems

Let's Learn

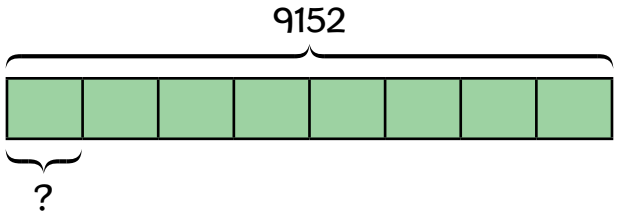
1. There are 6 cans of drinks in one carton.
How many cans of drinks are there in 3885 cartons altogether?



3885 × 6 = 23 310

There are **23 310** cans of drinks in 3885 cartons altogether.

2. Mrs Rahimah and her workers make 9152 curry puffs for sale daily.
She divides them equally among 8 outlets.
How many curry puffs does each outlet receive daily?



9152 ÷ 8 = 1144

Each outlet receives **1144** curry puffs daily.

3. Mrs Lim bought 28 cans of abalone.
Each can cost $45.
How much did she pay altogether?

28 × $45 = $1260

She paid **$1260** altogether.

7 Mr Tay had 1258 fish balls.
He put 5 fish balls in each bowl of noodles he sold.
He sold 154 bowls of noodles.
Find the greatest number of bowls of noodles he could sell with the remaining fish balls.

154 × 5 = 770

He used 770 fish balls altogether.

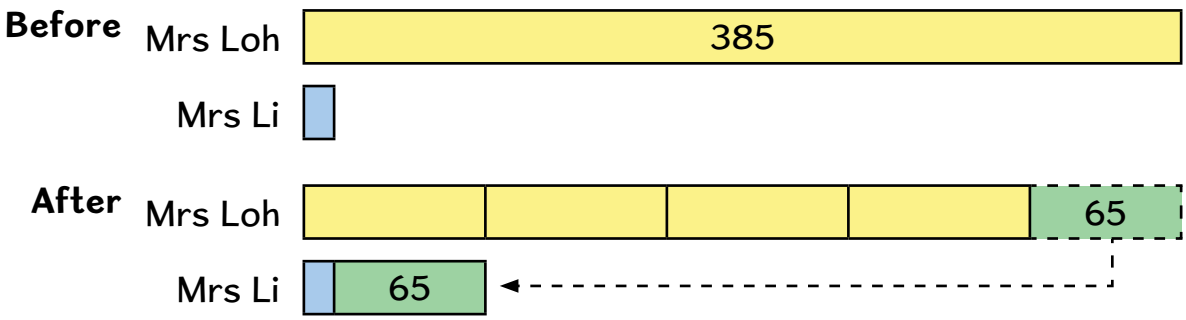
1258 – 770 = 488

He had 488 fish balls left after selling 154 bowls of noodles.

488 ÷ 5 = 97 R 3

The greatest number of bowls of noodles he could sell with the remaining fish balls was **97**.

8 Mrs Loh had 385 cookies at first.
She then gave Mrs Li 65 cookies and had 4 times as many cookies as Mrs Li.
How many cookies did Mrs Li have at first?



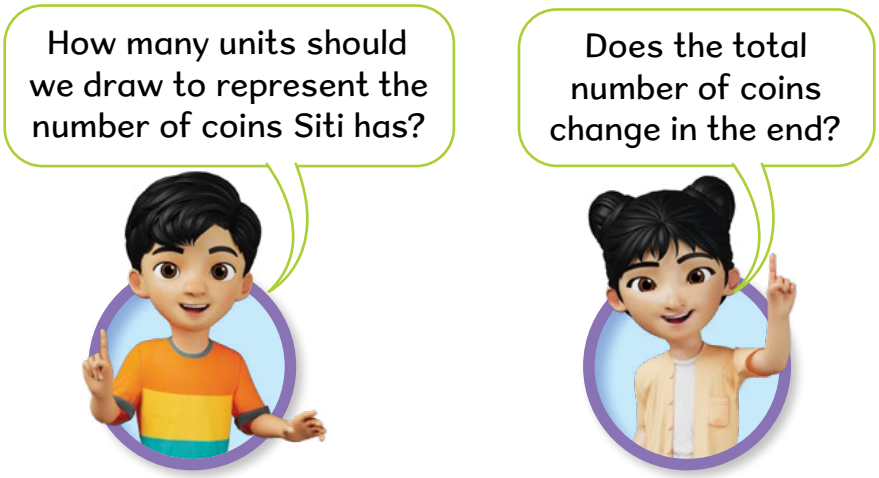
385 – 65 = 320

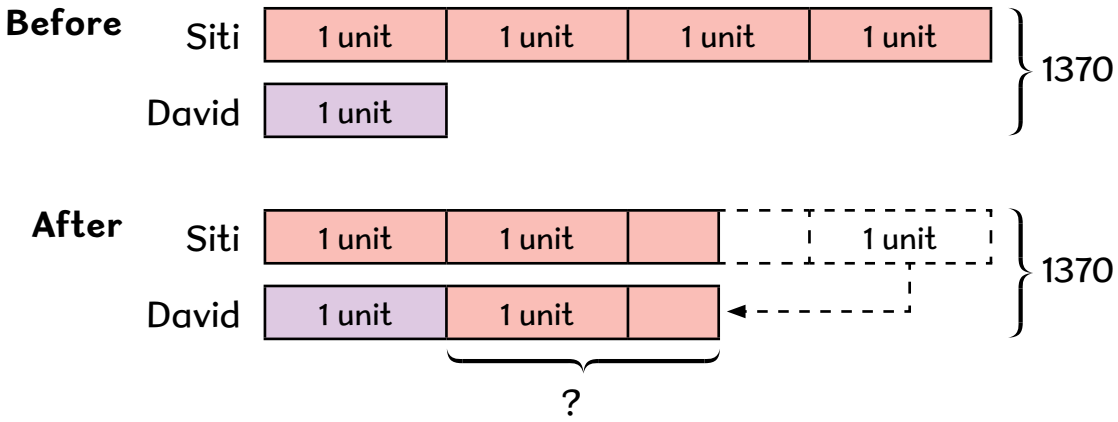
Mrs Loh had 320 cookies left after giving Mrs Li 65 cookies.

4 units = 320
1 unit = 320 ÷ 4
= 80
80 – 65 = 15

Mrs Li had **15** cookies at first.

9 Siti has 4 times as many coins as David.
They have 1370 coins altogether.
How many coins must Siti give to David so that they have the same number of coins in the end?





5 units = 1370

1 unit = 1370 ÷ 5
= 274

David has 274 coins.

1370 ÷ 2 = 685

To have the same number of coins, each of them should have 685 coins.

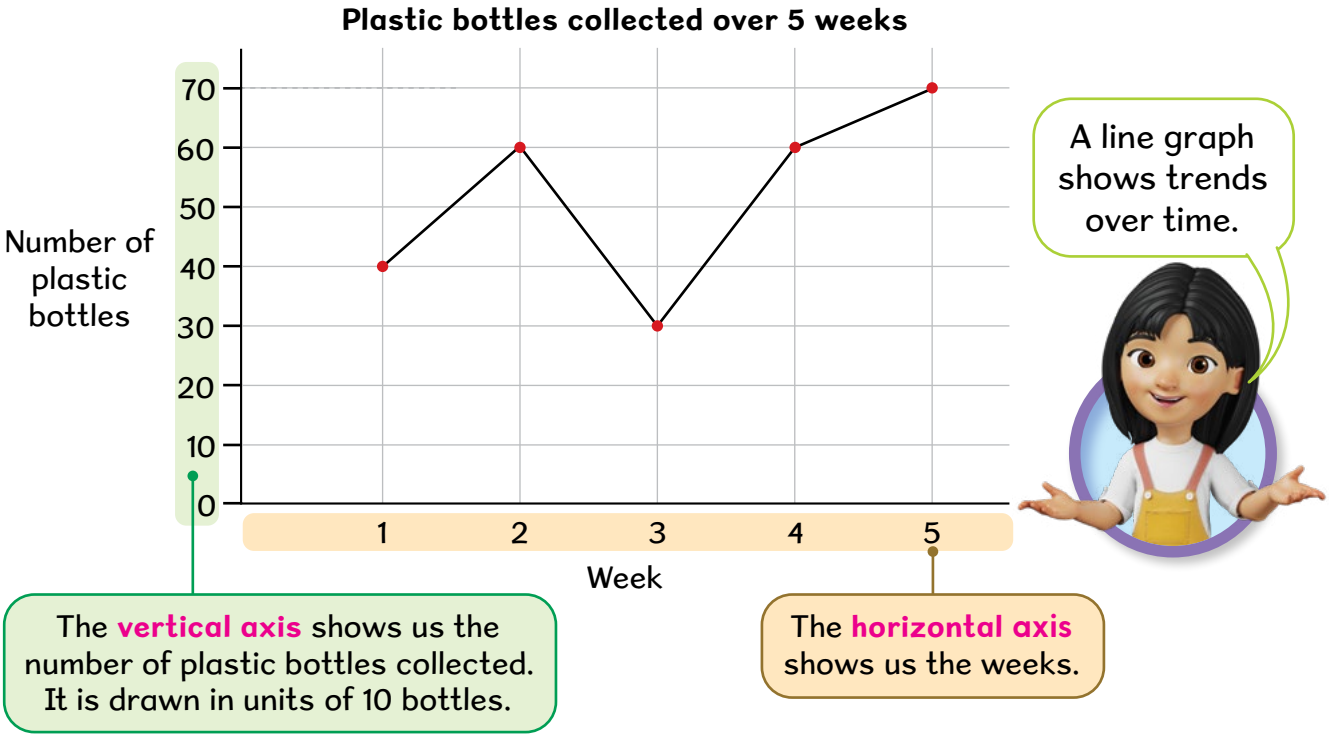
685 − 274 = 411

Siti must give **411** coins to David.

Line Graphs

Let's Learn

1 We can also present data using a **line graph**.
The line graph shows the number of plastic bottles collected at a beach over 5 weeks.



(a) How many plastic bottles were collected in Week 1?

40 plastic bottles were collected in Week 1.

(b) Which two weeks had the same number of plastic bottles collected?

The same number of plastic bottles were collected in **Week 2** and **Week 4**.

(c) How many more plastic bottles were collected in Week 4 than in Week 3?

60 – 30 = 30

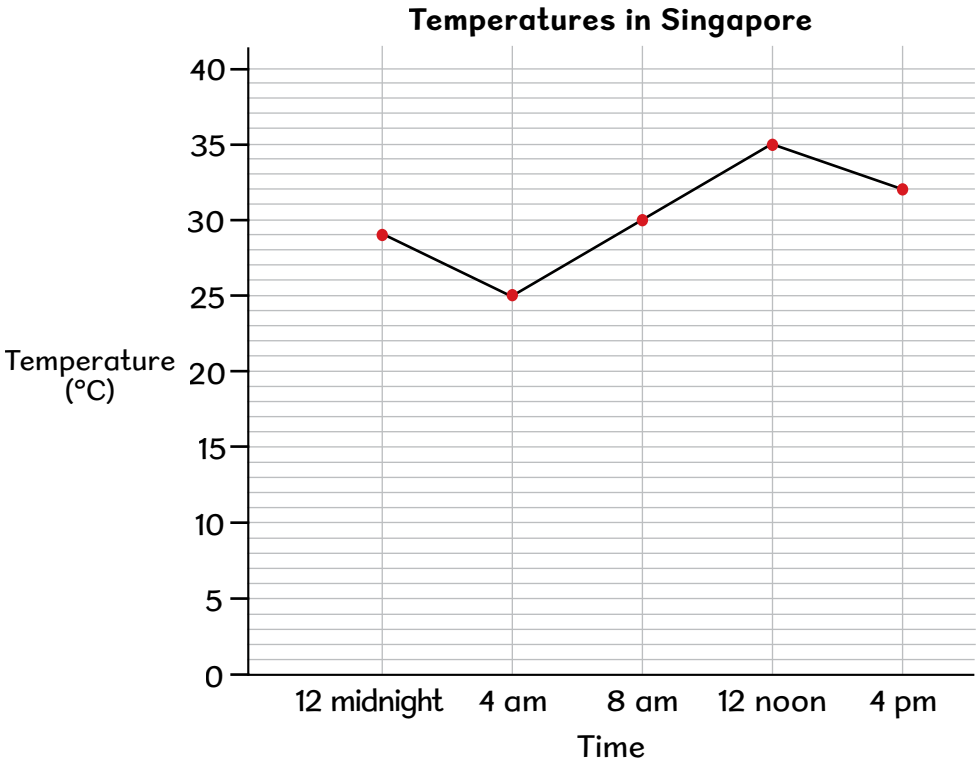
30 more plastic bottles were collected in Week 4 than in Week 3.

(d) How many plastic bottles were collected in total over the 5 weeks?

40 + 60 + 30 + 60 + 70 = 260

260 plastic bottles were collected in total over the 5 weeks.

2 The line graph shows the temperatures in Singapore recorded every 4 hours on a certain day.



(a) At what time was the highest temperature recorded?

The highest temperature was recorded at **12 noon**.

(b) At what time was the lowest temperature recorded?

The lowest temperature was recorded at **4 am**.

(c) What was the temperature at 8 am?

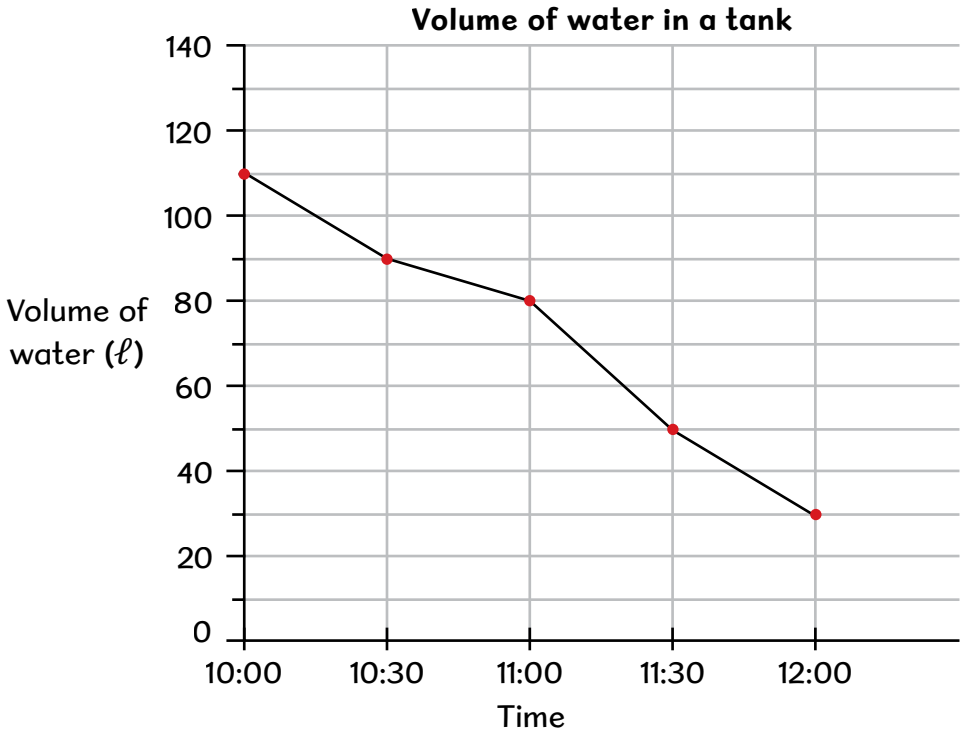
The temperature at 8 am was **30°C**.

(d) What was the difference in temperature between 12 midnight and 12 noon?

35°C – 29°C = 6°C

The difference in temperature was **6°C**.

3 A tank was completely filled with water at 10:00. The line graph shows the volume of water in the tank over a period of 2 hours.



(a) There was **110** ℓ of water in the tank at 10:00.

(b) **30** ℓ of water was left in the tank at 12:00.

(c) 110 - 80 = 30

30 ℓ of water was used from 10:00 to 11:00.

(d) The **greatest decrease** in the volume of water between any 30-minute interval is between **11:00** to **11:30**.

(e) The volume of water decreased by 10 ℓ from **10:30** to **11:00**.

Maths Talk

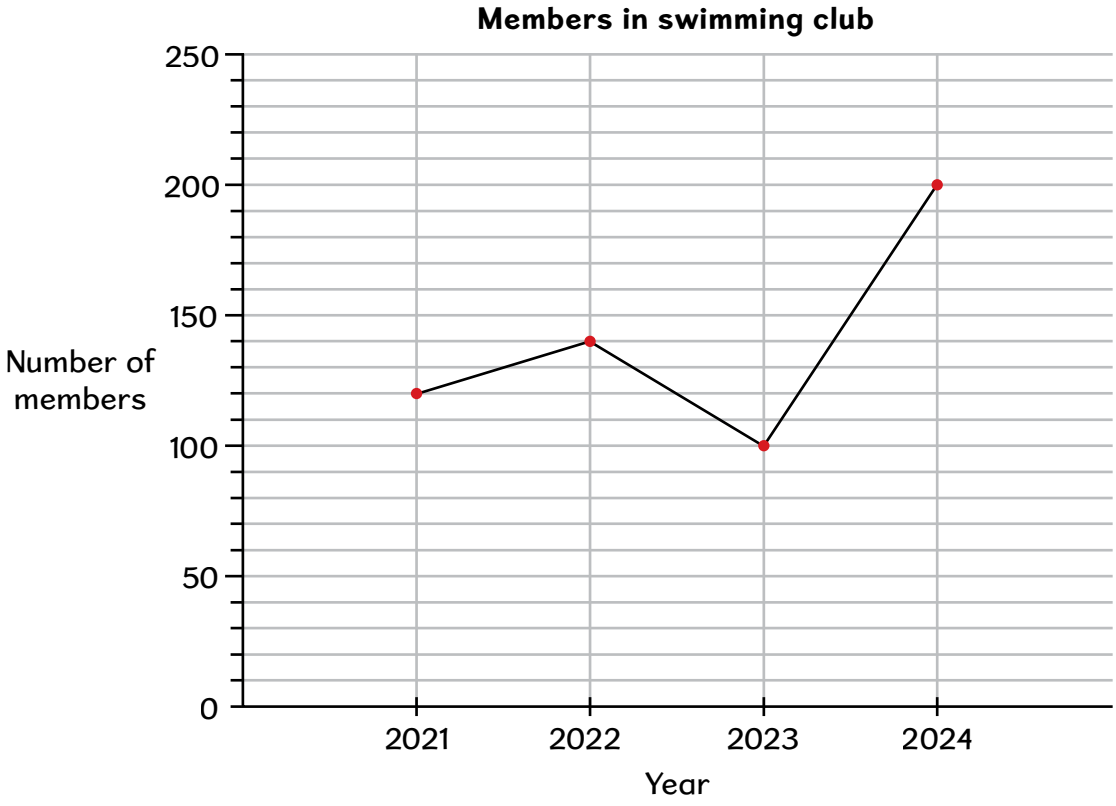
Discuss in groups.
Would you use a bar graph or a line graph to present the following data? Explain your choice and share your reasons with the class.

(a) Amount of rainfall over a period of time.

(b) Number of students in each of the 5 classes.

Let's Practise

1. The line graph shows the number of members in a swimming club from 2021 to 2024.



(a) How many members did the swimming club have in 2022?

(b) Which year did the swimming club have the least members?

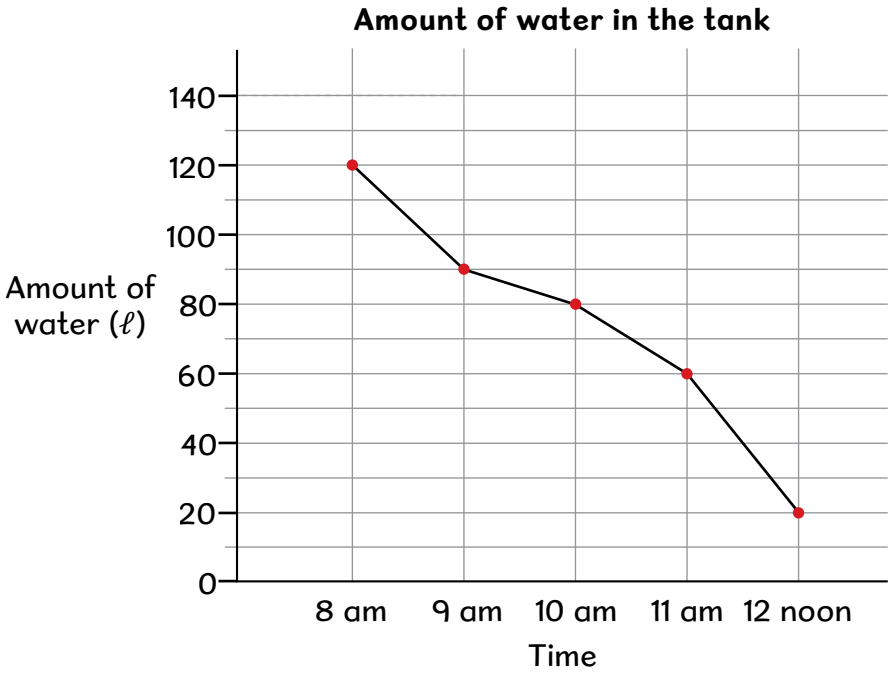
(c) How many more members were there in 2024 than in 2021?

(d) Which year had twice as many members as 2023?

(e) Which of the following would best describe the change in the number of members from 2021 to 2024?

	2021 to 2022	2022 to 2023	2023 to 2024
1.	Increase	Increase	Decrease
2.	Increase	Decrease	Increase
3.	Decrease	Increase	Decrease

2 Water began flowing out of a tank from 8 am.
The line graph shows the amount of water in the tank from 8 am to 12 noon.



(a) How much water was in the tank at 8 am? ____

(b) How much water was in the tank at 9 am? ____

(c) How many litres of water flowed out of the tank from 10 am to 11 am? ____

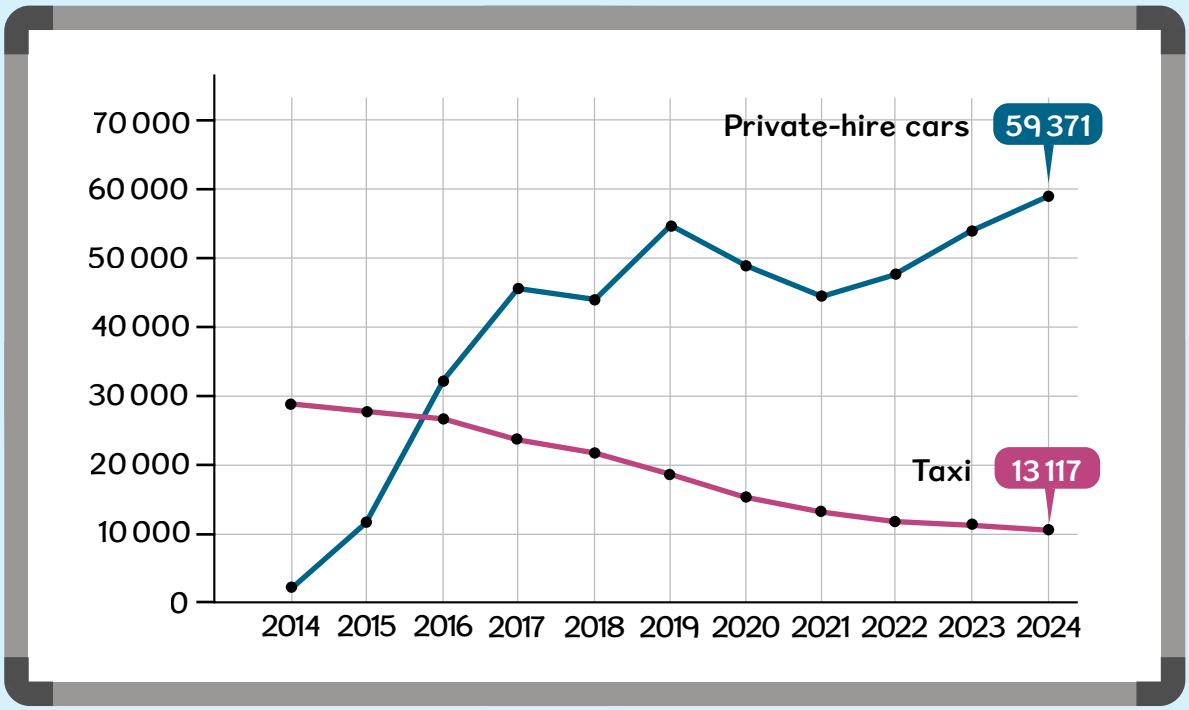
(d) At which hourly interval did the greatest amount of water flow out from the tank? ____

(e) How much water flowed out of the tank from 8 am to 12 noon? ____

Mathematics AROUND US

The line graph below shows the population of taxis and private-hire cars from 2014 to 2024 in Singapore.

Shrinking taxi population



Source: Adapted from LTA Straits Times Graphics.

(a) What do the line graphs above tell you?

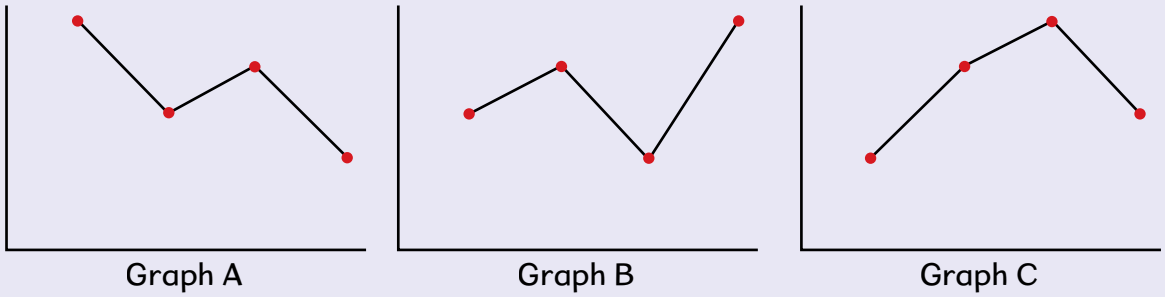
(b) Do you think this trend will continue after 2024? Explain.

Thinking Aloud

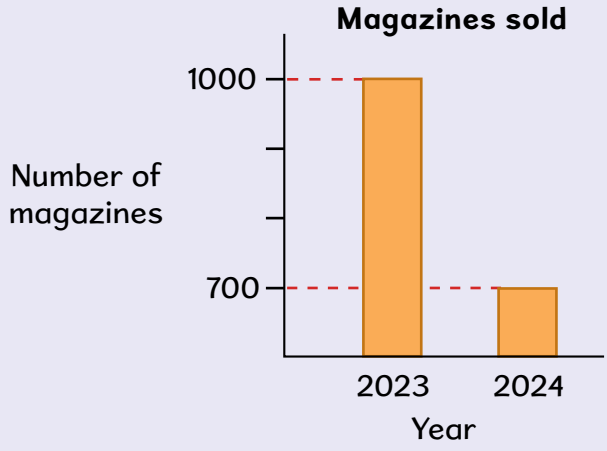
1. The bar graph below shows the number of visitors to an exhibition over 4 days.



Which line graph correctly represents the data from the bar graph?



2. The bar graph shows the number of magazines sold in 2023 and 2024.





Is Jayden correct?