Introduction

Write a story for the following multiplication:

142 x 12

Then solve the calculation.

Introduction

Write a story for the following multiplication:

142 x 12 = 1,704

For example:

Bill the baker has received an order for 142 dozen muffins. There are 12 muffins in a dozen. How many muffins does he have to bake?

Tanya is organising the art cupboard. 142 paint brushes will fit in a box. She fills 12 boxes. How many paint brushes does she have?

Varied Fluency 1

Use the formal multiplication method to complete the calculation below.

		2	6	3
x			3	4

263 x 34 = ☐

Varied Fluency 1

Use the formal multiplication method to complete the calculation below.

		2	6	3
x			3	4
	1	0_{2}	5_{1}	2
	7_{1}	8	9	0
	8	9	4	2
		1		

263 x 34 = 8,942

Varied Fluency 2

Complete the calculations below.

A.

		3	5	2
x			4	3

B.

		4	1	2
x			3	4

Which has the larger answer?

Varied Fluency 2

Complete the calculations below.

A.

		3	5	2
x			4	3
	1	0 (1)	5	6
1	4 (2)	0	8	0
1	5	1	3	6
		1		

B.

		4	1	2
x			3	4
	1	6	4	8
1	2	3	6	0
1	4	0	0	8
	1	1		

Which has the larger answer?

A has the larger answer.

Varied Fluency 3

Lara says,

The area of the check-in zone is twice as big as the area of the information board.

365cm

DEPARTURES

TIME	TO	FLIGHT	GATE
20 20	LONDON	AV 237	17
20 45	HELSINKI	BD 327	8
20 55	MOSCOW	SQ 214	23
21 15	PARIS	SG 394	12
21 30	MILAN	HR 543	8
21 40	AMSTERDAM	TY 339	11
21 55	LOS ANGELES	AS 742	10
22 05	CARACAS	DN 923	4

94cm

		3	6	5
x			9	4

What is the area of the check-in zone?

Varied Fluency 3

Lara says,

The area of the check-in zone is twice as big as the area of the information board.

365cm

DEPARTURES			
TIME	TO	FLIGHT	GATE
20 20	LONDON	AV 237	17
20 45	HELSINKI	BD 327	8
20 55	MOSCOW	SQ 214	23
21 15	PARIS	SG 394	12
21 30	MILAN	HR 543	8
21 40	AMSTERDAM	TY 339	11
21 55	LOS ANGELES	AS 742	10
22 05	CARACAS	DN 923	4

94cm

		3	6	5
x			9	4
	1	4	6	0
3	2	8 (2)	5 (2)	0
3	4 (5)	3 (4)	1	0

What is the area of the check-in zone? 34,310 x 2 = 68,620cm²

NOW COMPLETE THE VARIED FLUENCY ACTIVITY, CHOOSING EITHER DEVELOPING, EXPECTED OR GREATER DEPTH.

Problem Solving 1

Gemma and Olivier are working on the same calculations. They get different answers.

Gemma

		4	0	6
x			2	4
	1	6	0_{2}	4
	8	0_{1}	2	0
	9	6	2	4

Oliwier

		4	0	6
x			2	4
	1	6	2_{2}	4
	8	1_{1}	2	0
	9	7	4	4

Who is correct?

Problem Solving 1

Gemma and Olivier are working on the same calculations. They get different answers.

Gemma

		4	0	6
x			2	4
	1	6	0_{2}	4
	8	0_{1}	2	0
	9	6	2	4

Oliwier

		4	0	6
x			2	4
	1	6	2_{2}	4
	8	1_{1}	2	0
	9	7	4	4

Who is correct?

Oliwier is correct. 406 x 24 = 9,744.

Problem Solving 2

Complete the calculation so that calculation A is greater than calculation B.

A.

		6	1	3
x			3	4

B.

x				

Problem Solving 2

Complete the calculation so that calculation A is greater than calculation B.

A.

		6	1	3
x			3	4
	2	4	5_{1}	2
1	8	3	9	0
2	0	8	4	2
1		1		

B.

		6	1	2
x			2	5
	3	0	6_{1}	0
1	2	2	4	0
1	5	3	0	0
		1		

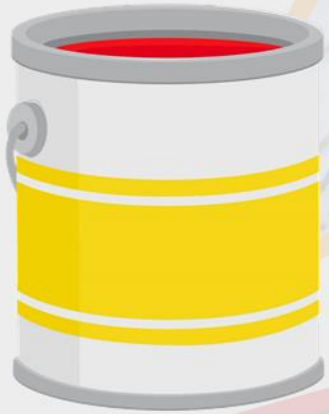
Various possible answers, for example:

612 x 25 = 15,300

Reasoning 1

Karl is painting his door red. One tin covers an area of 10,000cm². The door is 198cm x 76cm.

x				

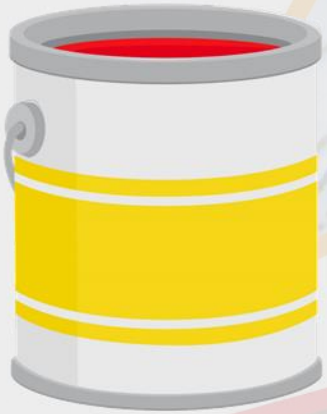


He thinks he needs to buy 15 tins. Is he correct? Explain your answer.

Reasoning 1

Karl is painting his door red. One tin covers an area of 10,000cm². The door is 198cm x 76cm.

		1	9	8
x			7	6
	1	1_{5}	8_{4}	8
1	3_{6}	8_{5}	6	0
1	5	0	4	8
	1	1		

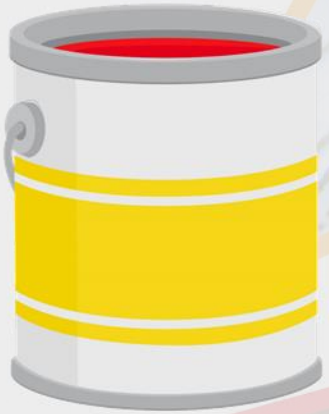


He thinks he needs to buy 15 tins. Is he correct? Explain your answer.
Karl is not correct because …

Reasoning 1

Karl is painting his door red. One tin covers an area of 10,000cm². The door is 198cm x 76cm.

		1	9	8
x			7	6
	1	1_{5}	8_{4}	8
1	3_{6}	8_{5}	6	0
1	5	0	4	8
	1	1		



He thinks he needs to buy 15 tins. Is he correct? Explain your answer.

Karl is not correct because 198 x 76 = 15,048 so Karl needs to buy 2 tins.

NOW COMPLETE REASONING + PROBLEM SOLVING ACTIVITY, CHOOSING EITHER DEVELOPING, EXPECTED OR GREATER DEPTH.

IF YOU HAVE TIME, COMPLETE THE HOMEWORK/EXTENSION ACTIVITY, CHOOSING EITHER DEVELOPING, EXPECTED OR GREATER DEPTH.

DON'T FORGET TO MARK YOUR ANSWERS!