

Year 5 Problems Summer 2 Week 1

Objective:

- Solve addition and subtraction multi-step problems in contexts deciding which operations to use and why.

At the start of February, there were 2,332 cans of baked beans in a supermarket.

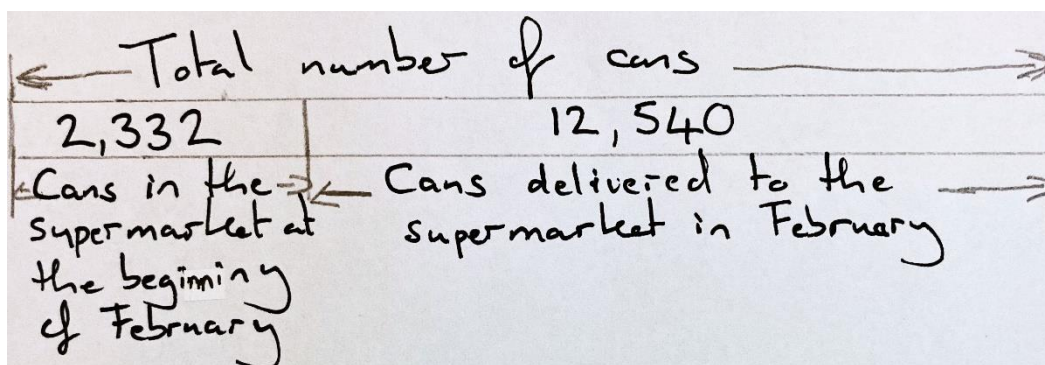
During February,

- 12,540 more cans of baked beans were delivered
- 13,492 cans of baked beans were sold.

How many cans of baked beans were left in the supermarket at the end of February?

Model answer

After reading this problem over a few times I can see that it will need more than one step to solve. We know that at the beginning of February there were 2,332 cans of baked beans in the supermarket. 12,540 more cans of baked beans were delivered in the month. Drawing a bar model could help me see the problem more clearly.



I can see I need to add these numbers together.

I shall estimate this calculation first using rounding.

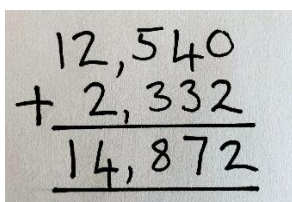
2,332 rounds to 2,300 to the nearest 100.

12,540 rounds to 12,500 to the nearest 100.

$$2,300 + 12,500 = 14,800$$

I now know the answer to this addition calculation will be approximately 14,800.

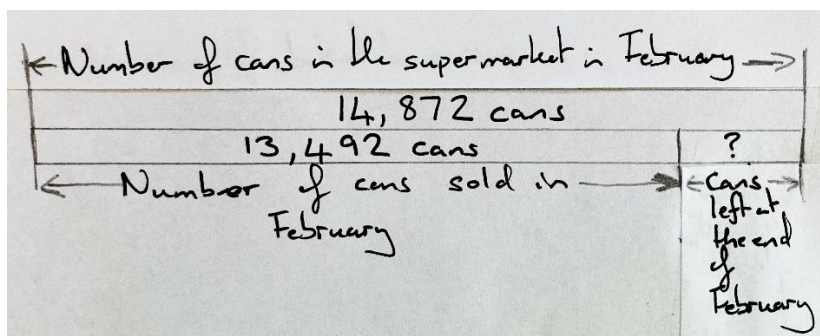
To carry out the calculation $2,332 + 12,540$ I need to decide whether to use a column method, a mental method, or some jottings. I think with this calculation any of those methods would work. It may be a bit tricky to keep the numbers in my head so I will use a column method this time.



$$\begin{array}{r} 12,540 \\ + 2,332 \\ \hline 14,872 \end{array}$$

My answer 14,872 is close to my estimate of 14,800.

I now need to go back to the problem and read it again. I know that supermarket had a total of 14,872 cans of baked beans in February. It sold 13,492 cans. Let's look at that with the bar model:



I can see I need to subtract 13,492 from 14,872 to solve the problem.

I shall estimate this calculation first using rounding.

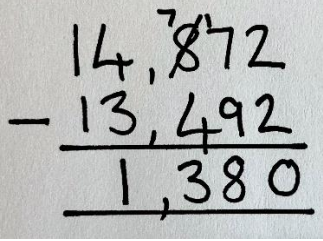
13,492 rounds to 13,500 to the nearest 100.

14,872 rounds to 14,900 to the nearest 100.

$$14,900 - 13,500 = 1,400$$

I now know the answer to this addition calculation will be approximately 1,400.

To carry out the calculation $14,872 - 13,492$ I need to decide whether to use a column method, a mental method, or some jottings. It may be a bit tricky to keep all the numbers in my head so I will use a column method this time.


$$\begin{array}{r} 14,872 \\ - 13,492 \\ \hline 1,380 \end{array}$$

My answer 1,380 is close to my estimate of 1,400.

The answer to the problem is the number of cans of baked beans that were left in the supermarket at the end of February was 1,380.

Now try these problems.

At the start of March, there were 1,380 cans of baked beans in a supermarket.

During March,

- 14,270 more cans of baked beans were delivered
- 12,321 cans of baked beans were sold.

How many cans of baked beans were left in the supermarket at the end of March?

Space for working

- How many cans of baked beans did the supermarket sell altogether in February and March?
- What was the difference between the number of cans of baked beans sold in February and March?

Space for working

Answers:

- 3,329 cans of baked beans were left in the supermarket at the end of March.
- The supermarket sold 25,813 cans of baked beans altogether in February and March.
- The difference the difference between the number of cans of baked beans sold in February and March was 1,171 cans.