## Maths Mastery

## Addition and Subtraction Problems Challenge Cards

## Addition and Subtraction Problems

Over the weekend, Nikita spends 85 minutes on her project and 45 minutes on her maths homework.

On Monday, she spends 65 minutes on her spelling and grammar homework.


Explain how you would work out how much longer she spends on her homework over the weekend. Can you find more than one method?

## Addition and Subtraction Problems

## Nikita has to solve this problem:

Mr Green drives a lorry. Last week he drove 197 miles, 232 miles and 164 miles on his 3 journeys.

This week he drove 309 miles and 265 miles on his 2 journeys.

What was the difference in mileage between this week and last week?

Nikita says it is best to find the total of miles for each week first. Discuss with a partner why this is the case, and then solve the problem.


## Addition and Subtraction Problems

Pavel buys a T-shirt for $£ 4.50$, a skirt for $£ 7.99$ and a pair of shorts. He pays for the items with a $£ 20$ note and gets the following coins as change.


Discuss with a partner your answer and compare methods. Can you find a way to solve this using a diagram?
How much were the shorts?

George read three books in January, which had 173 pages, 206 pages and 139 pages.

He has some books to read in February. Two books have 287 pages and 114 pages. How many more pages must he read to read more pages in February than in January?

Draw a diagram, such as a bar model, to explain how to calculate the answer, and then solve the problem.

Explain your ideas to a partner.


Pavel has been keeping a track of the number of calories he eats. On Monday he consumes 1760 calories. On Tuesday he consumes thirty more than Monday, and on Wednesday he consumes the same as Tuesday.

The daily recommended calorie intake for a ten year old boy is 2032 calories. Over the 3 days, by how much is Pavel's calorie intake less than the recommended amount?

Work with a partner to find 2 different ways of calculating the answer and solve in both ways, checking the answer.

## Addition and Subtraction Problems

Nikita wants to travel from Doncaster to Lincoln. If she gets the train at 20:27 she will arrive at Retford 36 minutes later. She will have a 20 minute wait for the 13 minute train to Lincoln.

Alternatively, she could get a direct train at 20:52 that takes 51 minutes. Which train will allow her to get to Lincoln first?

Show how you could use a timeline to explain your answer. Compare yours with a partner.

## Maths Mastery Addition and Subtraction Problems Answers

1. It is helpful to know in which week Mr Green did the most miles to complete the subtraction to find the difference. $(197+232+164)-(309+265)=19$
2. $(85+45)-65=65$

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85-65=20,45+20=65
$$

3. $£ 5.25$

4. 

| 173 pages | 206 pages | 139 pages |
| :--- | :---: | :---: |
| 287 pages | 114 pages | $\mathbf{1 1 7}$ pages |

5. 6. Find the total number of calories consumed over the 3 days and then subtract from $2032 \times 3$.
1. Find the difference for each day and add together. 756 calories.
2. Answers will vary

