

Maths Mastery

Addition and Subtraction Multistep Problems Challenge Cards

On Sunday, Jacob spent 86 minutes on his maths homework and 37 minutes reading. On Tuesday, he spent 69 minutes on his project.

What calculations will you use to find the difference between the time spent on homework on Sunday and Tuesday?



Jacob received \$25.90 for his birthday. He spent \$8.99 on a book and \$7.50 on a computer game. Show three different calculation steps you could use to find how much money he has left.



At the beginning of the day, a grocer has 239 apples. He receives another 144 from his supplier and sells 307 during the day.

Khalid calculates how many apples the grocer has by the end of the day:

$$307 - 239 = 68, 68 + 144 = 212 \text{ apples left.}$$

Explain the mistake Khalid has made.

Come up with your own word problem with a mistake for a partner to spot.



Alisha has \$18.35 in her purse. Her father gives her \$5 pocket money. She buys a book for \$7.99 and a bag for \$13.49. How much will she have left?

Naomi says Alisha has \$1.87 left.
Jack says Alisha has \$3.13 left.
Who is correct and what mistakes have been made?



What other errors might be made?

A pizza shop makes 176 pizza bases before opening. Over the evening, they sell 247 pizzas. During the evening, they make another 80 pizza bases. How many pizza bases will be left at the end of the evening?

Bailey says they have 151 pizza bases left.

Ashleigh says they have 9 pizza bases left.

Who is correct and what mistakes have been made? What other errors might be made?

Write a word problem for which this calculation is used to find the answer.

$$456 + 237 - 598 = 95$$

Check your problem with a partner.
What mistakes might someone make when trying to solve the problem?

Write a word problem for which this calculation is used to find the answer.

$$\$9.67 + \$8.22 = \$17.89$$

$$\$3.49 + \$5.75 = \$9.24$$

$$\$17.89 - \$9.24 = \$8.65$$

Check your problem with a partner.
What mistakes might someone make when trying to solve the problem?

Answers

1. $86 + 37 = 123$ minutes on Sunday
 $123 - 69 = 54$ minutes difference
2. $\$25.90 - \$8.99 = \$16.91$
 $\$16.91 - \$7.50 = \$9.41$
 $\$25.90 - \$7.50 = \$18.40$
 $\$18.40 - \$8.99 = \$9.41$
 $\$8.99 + \$7.50 = \$16.49$
 $\$25.90 - \$16.49 = \$9.41$
3. Khalid began by subtracting the number of apples at the beginning of the day from the number of apples sold. The answer of 68 is then the number of the apples delivered that day that were sold, so the answer would come from $144 - 68 = 76$.

Another way would be to add the number of apples at the beginning of the day to the apples delivered: $239 + 144 = 383$.
Then subtract the number sold from this total: $383 - 307 = 76$

4. Naomi is correct: $\$18.35 + \$5 - \$7.99 - \13.49
Jack is incorrect: $\$7.99 + \$13.49 - \$18.35$. He has missed out the \$5 pocket money and subtracted the money in the purse from the amount spent.
5. Ashleigh is correct: $176 + 80 - 247 = 9$
Bailey is incorrect: $247 + 80 - 176 = 151$. He has added the number sold to the number of extra bases then subtracted the number of bases they had at the start of the evening.
6. Answers will vary
7. Answers will vary