

1: Failed Instance:

ChatGPT 3.5 ▾



You

I went to the market, bought 10 oranges and gave 2 oranges to my dog and ate 8 oranges. I again went to the market, bought 4 apples and ate 3? How many fruits have I got left?

Give a direct answer



ChatGPT

You have 9 fruits left.

- The correct answer is 1 fruit.

Prompting Technique: Zero-shot chain-of-thought (Zero-shot CoT)

Prompt and Input Text:

I went to the market, bought 10 oranges and gave 2 oranges to my dog and ate 8 oranges. I again went to the market, bought 4 apples and ate 3? How many fruits have I got left?

Think step by step

ChatGPT Output Screenshot:



You

I went to the market, bought 10 oranges and gave 2 oranges to my dog and ate 8 oranges. I again went to the market, bought 4 apples and ate 3? How many fruits have I got left?

Think step by step



ChatGPT

Sure, let's break it down step by step:

1. Bought 10 oranges.
2. Gave 2 oranges to your dog, so you have $10 - 2 = 8$ oranges left.
3. Ate 8 oranges, so you have $8 - 8 = 0$ oranges left.

Now, you go to the market again:

1. Bought 4 apples, so you have $0 + 4 = 4$ fruits.
2. Ate 3 apples, so you have $4 - 3 = 1$ fruit left.

So, you have 1 fruit left.

Zero-shot CoT produces the correct answer.

2: Failed Instance:

ChatGPT 3.5 ▾



You

Q. I went to the market, bought 10 oranges and gave 2 oranges to my dog and ate 8 oranges. I again went to the market, bought 4 apples and ate 3? How many fruits have I got left?

A. The answer is 1 fruit.

Q. Alex went to the market, bought 10 oranges and gave 2 oranges to his cat and ate 8 oranges. Alex again went to the market, bought 4 apples and ate 2? How many fruits have Alex got left?



ChatGPT

The information provided suggests that Alex had 12 fruits to begin with (10 oranges + 2 apples). After giving 2 oranges to the cat and eating 8 oranges, Alex had 2 oranges left. Then, after buying 4 apples and eating 2, Alex has 2 oranges and 2 apples left. So, Alex has a total of 4 fruits left.

- The correct answer is 2 fruits.

Prompting Technique: Chain-of-thought (CoT)

Prompt and Input Text:

Q. I went to the market, bought 10 oranges and gave 2 oranges to my dog and ate 8 oranges. I again went to the market, bought 4 apples and ate 3? How many fruits have I got left?

A. The answer is 1 fruit. $10 - 2 - 8 + 4 - 3 = 1$

Q. Alex went to the market, bought 10 oranges and gave 2 oranges to his cat and ate 8 oranges. Alex again went to the market, bought 4 apples and ate 2? How many fruits have Alex got left?

ChatGPT Output Screenshot:



You

Q. I went to the market, bought 10 oranges and gave 2 oranges to my dog and ate 8 oranges. I again went to the market, bought 4 apples and ate 3? How many fruits have I got left?

A. The answer is 1 fruit. $10 - 2 - 8 + 4 - 3 = 1$

Q. Alex went to the market, bought 10 oranges and gave 2 oranges to his cat and ate 8 oranges. Alex again went to the market, bought 4 apples and ate 2? How many fruits have Alex got left?



ChatGPT

Let's calculate the number of fruits Alex has left:

Initial fruits = 10 oranges

After giving 2 oranges to the cat and eating 8 oranges = $10 - 2 - 8 = 0$ oranges

After buying 4 apples = $0 + 4 = 4$ fruits

After eating 2 apples = $4 - 2 = 2$ fruits

So, Alex has 2 fruits left (2 apples).



CoT produces the correct answer.

3: Failed Instance:



You

I went to market day before today. I went to meet my friend the day before I went to market. How many days ago I went to met my friend?



ChatGPT

Let's break it down:

1. You went to the market the day before today.
2. You went to meet your friend the day before you went to the market.

If today is the current day, then:

- The day before today is yesterday.
- The day before you went to the market is the day you met your friend.

So, you met your friend yesterday.



- The correct answer is 2 days.

Prompting Technique: Program of thoughts

Prompt and Input Text:

I went to market day before today. I went to meet my friend the day before I went to market. How many days ago I went to met my friend? Give python code

ChatGPT Output Screenshot:



You

I went to market day before today. I went to meet my friend the day before I went to market. How many days ago I went to met my friend? Give python code



ChatGPT

Certainly! You can use the `'datetime'` module in Python to calculate the number of days between two dates. Here's a simple example:

python

Copy code

```
from datetime import datetime, timedelta

# Current date
today = datetime.now()

# Calculate the date when you went to the market
market_day = today - timedelta(days=1)

# Calculate the date when you met your friend
friend_day = market_day - timedelta(days=1)

# Calculate the number of days ago you met your friend
days_ago = (today - friend_day).days

print(f"You met your friend {days_ago} days ago.")
```

This code calculates the current date (`'today'`), the date when you went to the market (`'market_day'`), and the date when you met your friend (`'friend_day'`). Then, it calculates the number of days between the current date and the date you met your friend and prints the result.



This python code produces the correct output of “You met your friend 2 days ago.”

4.Failed Instance:



You

Q. I went to the market 10 days ago. I went to meet my friend 2 days before I went to the market. How many days ago did I met my friend?

A. The answer is $10 + 2 = 12$ days.

Q. I went to gym day before yesterday. I went to the movies 2 days before I went to the gym. How many days ago I had went to the movies?



ChatGPT

If you went to the gym day before yesterday and you went to the movies 2 days before going to the gym, then you went to the movies $2 + 1 = 3$ days ago.

Prompting Technique: Self Consistency Prompting

Prompt and Input Text:

Q. I went to the market 10 days ago. I went to meet my friend 2 days before I went to the market. How many days ago did I met my friend?

A. The answer is $10 + 2 = 12$ days.

Q. I went to gym day before yesterday. I went to the movies 2 days before I went to the gym. How many days ago I had went to the movies?

ChatGPT Output Screenshot:



You

Q. I went to the market 10 days ago. I went to meet my friend 2 days before I went to the market. How many days ago did I met my friend?

A. The answer is $10 + 2 = 12$ days.

Q. I went to gym day before yesterday. I went to the movies 2 days before I went to the gym. How many days ago I had went to the movies?



ChatGPT

A. If you went to the gym day before yesterday and went to the movies 2 days before going to the gym, you can add the two time intervals:

2 days (movies before gym) + 2 days (gym before today) = 4 days ago you went to the movies.





You

Q. I went to the market 10 days ago. I went to meet my friend 2 days before I went to the market. How many days ago did I met my friend?

A. The answer is $10 + 2 = 12$ days.

Q. I went to gym day before yesterday. I went to the movies 2 days before I went to the gym. How many days ago I had went to the movies?



ChatGPT

If you went to the gym day before yesterday and you went to the movies 2 days before going to the gym, then you went to the movies $2 + 1 = 3$ days ago.

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You

Q. I went to the market 10 days ago. I went to meet my friend 2 days before I went to the market. How many days ago did I met my friend?

A. The answer is $10 + 2 = 12$ days.

Q. I went to gym day before yesterday. I went to the movies 2 days before I went to the gym. How many days ago I had went to the movies?



ChatGPT

To determine how many days ago you went to the movies, you can add the number of days you went to the gym and the number of days between going to the gym and going to the movies.

Let's break it down:

1. You went to the gym day before yesterday, which is 2 days ago.
2. You went to the movies 2 days before going to the gym.

So, to find out how many days ago you went to the movies, add the two time intervals:

$2 \text{ days (going to the gym)} + 2 \text{ days (time between going to the gym and going to the movies)} = 4 \text{ days}$

Therefore, you went to the movies 4 days ago.

- The correct answer is 4 days which is produced more times.

5. Failed Instance:



You

I had 10 kg rice in my house yesterday. Me and my housemates ate 2 kg rice today. The next day I come home to find 12 kgs rice. How much rice is bought by my housemates from the market the next day?



ChatGPT

The information you provided seems inconsistent. If you started with 10 kg of rice, and you and your housemates ate 2 kg, the total consumed would be $10 \text{ kg} - 2 \text{ kg} = 8 \text{ kg}$. However, you mentioned that the next day you found 12 kg of rice.

If we assume that the rice consumption and the rice you found are unrelated, and you are asking how much rice your housemates bought the next day, we can't determine that from the information provided. The quantity of rice you found the next day doesn't seem to be related to the amount your housemates bought.

If there's additional information or clarification, please provide it so I can help you better.



Prompting Technique: Program aided Language Models

Prompt and Input Text:

Q. I had 10 kg rice in my house yesterday. Me and my housemates ate 2 kg rice today. The next day I come home to find 12 kgs rice. How much rice is bought by my housemates?

A.

`rice_yesterday = 10 kgs`

`rice_ate = 2 kgs`

`rice_next_day = 12 kgs`

`rice_bought = rice_next_day - rice_yesterday + rice_ate`

The answer is 4 kgs

Q. Alex had 10 kg rice in his house yesterday. Alex and his housemates ate 2 kg rice today. The next day Alex comes home to find 14 kgs rice. How much rice is bought by Alex's housemates?

ChatGPT Output Screenshot:



You

Q. I had 10 kg rice in my house yesterday. Me and my housemates ate 2 kg rice today. The next day I come home to find 12 kgs rice. How much rice is bought by my housemates?

A.

rice_yesterday = 10 kgs

rice_ate = 2 kgs

rice_next_day = 12 kgs

rice_bought = rice_next_day - rice_yesterday + rice_ate

The answer is 4 kgs

Q. Alex had 10 kg rice in his house yesterday. Alex and his housemates ate 2 kg rice today. The next day Alex comes home to find 14 kgs rice. How much rice is bought by Alex's housemates?



ChatGPT

Let's use a similar approach to the one you provided for the first scenario:

plaintext

Copy code

```
rice_yesterday = 10 kgs
rice_ate = 2 kgs
rice_next_day = 14 kgs
rice_bought = rice_next_day - rice_yesterday + rice_ate
```

Now, let's calculate:

plaintext

Copy code

```
rice_bought = 14 kgs - 10 kgs + 2 kgs
```

So, in this scenario, the amount of rice bought by Alex's housemates is 6 kgs.