

Materials Needed:

- Paper or whiteboard
 - Pencils, crayons, or markers
 - Optional: Small toys or pictures representing Mario Kart characters (Mario, Luigi, Peach, Bowser) and items (Coins, Mushrooms, Shells, Bananas, Item Boxes)
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Mario Kart Algebra Adventure!

Hey Super Racer! Did you know that even in Mario Kart, we use math? Today, we're going on an algebra adventure, just like a race on Rainbow Road, but with numbers and mystery boxes!

What's in the Mystery Box?

In Mario Kart, when you drive through an item box (?), you get a surprise item, right? Sometimes it's a Mushroom, sometimes a Shell, sometimes a Banana. You don't know until it reveals itself!

In math, sometimes we have a mystery number. We can use a symbol, like our Mario Kart item box (?), to stand for that hidden number. Finding the hidden number is like getting your surprise item!

Let's try it!

Addition Race!

Imagine Mario is racing. He already collected **3 coins**.

Then, he drives through a mystery item box (?) and gets more coins!

After opening the box, Mario counts all his coins and now has **7 coins** in total.

How many coins were hiding in the mystery box?

We can write this like a math problem:

$$3 + ? = 7$$

Think: What number do we add to 3 to get 7? Let's count up from 3: 4, 5, 6, 7. That was 4 counts!

So, the mystery box (?) had **4 coins**!

$$3 + 4 = 7$$

Subtraction Challenge!

Okay, now Princess Peach starts the race with **10 bananas**.

Oh no! She spins out on a shell and drops some bananas (?).

She looks back and sees she only has **6 bananas** left.

How many bananas did Peach drop from the mystery spill?

We can write this as:

$$10 - ? = 6$$

Think: What number do we take away from 10 to end up with 6? You can count down from 10 until you reach 6: 9, 8, 7, 6. That was 4 counts!

So, the mystery spill (?) was **4 bananas!**

$$10 - 4 = 6$$

Your Turn, Racer!

Let's solve these mystery box problems:

1. Luigi got 5 Mushrooms. Then he hit an item box (?) and got more. Now he has 9 Mushrooms! How many were in the box?
 $5 + ? = 9$
2. Bowser had 8 Red Shells. He threw some (?) at Mario. Now he only has 2 Red Shells left. How many did he throw?
 $8 - ? = 2$
3. Yoshi collected 2 coins. He found a mystery box (?) with more coins. Now he has 10 coins! How many coins were inside?
 $2 + ? = 10$
4. Toad started with 7 Green Shells. He dropped some (?) behind him. Now he has 5 left. How many did he drop?
 $7 - ? = 5$

Great job, Super Math Racer! You figured out the mystery numbers just like finding the best items in Mario Kart! You're using algebra!