

## Doing the Math

Your friend asks you a question. “You work two hours today and two hours tomorrow. With, of course, an hour a day bonus. How many hours do you get?”

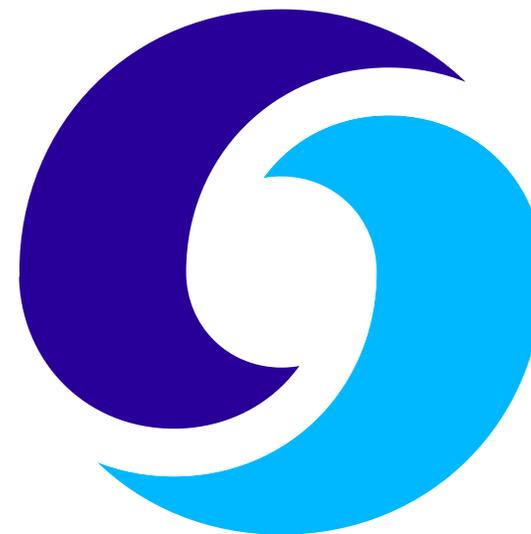
“Six.”

Six hours, not four. Yet you maintain that two plus two equals four. How do you do the math?

You demonstrate by shuffling pennies again. Then you proceed to solving the puzzle. “Look, two plus two equals four hours working,” you say, adding up the hours. “Then there are one, two days, times one bonus hour per day equals two bonus hours. Four hours working plus two bonus hours is six hours total.”

Your friend laughs in disbelief. She just adds the hours.

Where your friend lives, it is important for everyone to be paid well in relation to everyone else. An hour a day bonus is standard. Because it’s fair. They don’t need—or want—mathematics with the ability to advantage some people over others. It’s inconceivable.



## Two Plus Two

*The Answer Is Indisputable*



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## Wrong

You believe that two plus two equals four. You meet someone who says that two plus two equals six. She is wrong, you are right. But you want to be open minded. So you discuss the subject intelligently.

You demonstrate by placing four pennies on a table, in two groups of two. “Two plus two . . .” you push the two groups together, “equals four.”

The other person contributes two more pennies. “Equals six.”

“But that’s not two plus two any more! You added an extra two. Let’s try again. Here’s two. Plus two more. Now we stop. How many pennies do you see?”

“Four.”

“So we’re agreed. Two plus two equals four.”

She looks confused. You win. A few weeks later, you meet with her again. “Two plus two,” she says, “equals six.”

You tear your hair out. “We already discussed this! Why do you persist in saying that two plus two equals six?”

“It’s obvious.”

“It’s not obvious!” You argue for a while. She maintains her position. You maintain yours.

But then there’s a break. She gives you a list of books and articles to support her position. Proof!

A few weeks later, you meet again. “Two plus two,” you say, “equals four.”

She tears her hair out.

## What Did You Learn?

You had an open minded discussion and what did you learn? That evidence isn’t always proof? That some divides—differences of opinion—are too big to be crossed? That your daft friend has plenty of company?

You learned the source of your friend’s misconceptions.

Not very interesting. So why bother? Have discussions with people who at least know the answers to such simple questions as two plus two equals four.

This goes for your friend too. Have discussions with people who at least know the answers to such simple questions as two plus two equals six.

## That Can’t Be Right!

Very clever, but it doesn’t work both ways. One answer is clearly right, and the other is clearly wrong. Let’s not be so egalitarian as to pretend otherwise.

The problem is that the two views can’t be reconciled, and the mistaken view (two plus two equals six) is unwilling to be lost. The two views flourish in isolation until—inevitably—they come into contact. *Crash!*

You showed your friend how adding two pennies to two pennies made four pennies. Four pennies, not six. Yet she maintains that two plus two equals six. How does she do the math?